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School of Business and Management

Strategic Finance and Business Analytics

Master's Thesis

**Post-Acquisition Performance and Methods of Integration in the Video Game Industry: A
case study**

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Tutkimuksen motivaatio on lähtöisin elämäni halki kestäneestä peliharrastuksesta, sekä halusta yhdistää tämä kiinnostus ja intohimo opintoihini. Olen aina halunnut ymmärtää peliteollisuutta paremmin ja tämän kautta kehittää sitä omalla tavallani parempaan suuntaan. Kiinnostukseni tarkastella pelialalla tapahtuvia yritysostoja vuorostaan lähti siitä, että yritysostot ovat erittäin haastavia niiden osapuolina oleville yrityksille, ja epäonnistuessaan saattavat johtaa ostetun yrityksen purkamiseen. Koin tämän äärimmäisen merkittävänä arvoa tuhoavana asiana, joka voi pahimmillaan myös vaikuttaa hyvin negatiivisesti itselleni tärkeisiin asioihin.

Tutkimuksen tavoitteena oli tarkastella, minkälaisia yritysostoja peliteollisuudessa tehdään ja minkälaiset kombinaatiot ovat järkeviä, tai ainakin järkevämpiä kuin toiset. Tämä toteutettiin tarkastelemalla yleisimpiä yritysostojen motiiveja, erilaisia yritysostoja ja tapoja, joilla yritykset voidaan saattaa osaksi toisiaan tehokkaasti. Tutkimus toteutettiin case-tutkimuksena ja havaittiin, että yritys, jonka toimialalla ja strategialla oli selkeämpi yhteys ostettavaan yritykseen, sai paremmat tulokset mittareilla.

Abstract

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The motivation for this thesis comes from a lifelong passion for the video game industry and the desire to combine it with my studies. I have always wanted to understand the video game industry better and even work to benefit it. My interest to in acquisitions in the video game industry rose from understanding that acquisitions are highly challenging to the parties involved, and that when they fail, they can lead to even the divestment of the acquired company. I felt that this was a highly value destroying phenomenon and at worst an issue that affected things were important to me negatively.

The aim of the thesis was to study the acquisitions being done in the video game industry and what combinations of firms are reasonable, or at least more efficient than others. This was done by studying the most common motivations for acquisitions, different types of acquisitions and the ways by which combined firms can be integrated efficiently. The research method of choice was case study, and it was observed, that a companies whose operations and strategy are aligned, gained better results with the measures chosen.

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I suppose that in some way, finishing this thesis and graduating has been an important rite of passage for me. If I had to choose a word to describe the process from start to finish, then “arduous” would definitely be my choice. The work never really turned into a routine that was simply done during the day, that I got used to over time. For almost the entirety of the writing process, I had to shift my mindset from work, to thesis painstakingly. Thinking of a subject was challenging as well, and finally as I pinned the subject down to what I wanted to write on, the subject itself was complex and multi-faceted. Nevertheless, now that it’s done, I’m happy to have finally finished it and graduated. I am going to risk sounding exceedingly cliché, but the fact that I had to push myself very hard, may very well be the thing that made worth it on a personal level.

I can easily say that my time at LUT has included the best years of my life so far. There are no words that can accurately give justice to the experiences that I’ve had and the personal growth that these years have given me. Even so, the greatest boon that university gave me are all the wonderful people I have met and got to know during my studies.

First off, I would like to thank my examiners Mikael Collan ja Jyrki Savolainen. I wish to extend an especially heartfelt thank you to prof. Collan for your advice and patience. I believe it is safe to say that without your guidance, the thesis might have gone unfinished. I also wish to thank my friends, the experiences that I have shared with you during these many years will stay with me until my time here is done, and I’m thankful for every minute.

Mother, I thank you for all the support and understanding that you’ve given me. I would not be where I am right now, were it not for you. In fact, I am not completely sure where I would be without you. You have always helped me when I needed it. Father, as I look back, you encouraged me to go towards an academic direction. Eventually, I verified for myself that it was indeed the correct direction for me. In the end, you gave me the courage to truly follow my heart where it pulled me. I only wish that you could have seen it.

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Helsinki, November 25th 2018

Esko Väänänen

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1. Introduction

The video and computer game industry has developed greatly over the last decades. The industry has consolidated from a mish mash of different video game companies each trying to get their product to consumers by varying results, to a structured industry where different parts of the value-chain are handled by different operators. Video and computer games in general, have also become more of a staple in the common household, instead of occupying the shelves in the basement gaming lair of a die-hard fan.

The budgets of games have also skyrocketed, and in case of truly massive undertakings like Call of Duty and the like, they may even have known actors playing as characters. Following the increasing popularity of games, the profits involved in the industry have also become far greater. Games that exceed a certain threshold of popularity can be utilized as a source of steady income by implementing sequels, as they are by more cost-effective to produce.

Increasing popularity and escalating demands for quality in games implies the fact that large games are also more expensive, time consuming and require more manpower to produce. Therefore, the risk that the company takes by beginning production has also escalated. Big publishers have relatively little incentive to have a developing studio make an entirely new, but possibly highly popular franchise, if they could use the same resources to make a sequel to an already popular game. In this niche, there exist the start-up video game studios, as the possible source of new income for companies. These companies on the other hand have the necessary original ideas for new types of games but lack the funding to manufacture en masse. The companies, or studios require funds and due to their products, can be valuable to publishers and other types of investors and companies.

What will be studied in this thesis is the way to efficiently combine these two attributes. The motivation behind the acquisition will be considered, as will the attributes of the firms that are parties to the acquisition. In other words, the strategic relationship between the firms will be evaluated as will the benefits that the acquirer seeks to gain from the acquisition. Directly linked to this issue is the integration approach that the acquirer seeks to put into action after the acquisition. The integration approach needs to fit the relationship of the two companies, and there is a link between performance and integration approach that will be tested by utilising accounting measures.

The focus of this thesis is two-fold. First the perspective of the prospective acquirer/investor is taken to understand the different benefits, downsides and requirements of the ways of investing in gaming companies. These are studied in detail, as are the motivations and desires of the different parties in

each type of investment. Second, the study aims to provide insight as to whether one type of investment is superior to the other. This is done by conducting a case-study where to real-life investments are analyzed. Acquisition will be analyzed from the post-merger point of view. It is the phase at which there should be synergies to be reaped, and which should be the rationale behind the entire acquisition. Should complementary synergies exist, then acquiring the company is more than justified. The different levels of autonomy that the acquired company could be afforded is also taken into account.

1.1.Theoretical framework

Mergers and Acquisitions (M&A) have been an enduring phenomenon in economics. For corporations, they are a way of gaining market power and achieving growth, among other things. To researchers their appeal lies in the controversial results in the lion's share of acquisitions and in the complexity of the transactions and their repercussions. In fact, M&A activity are one of the most researched areas in finance and business. The evidence gained over the last century seems to suggest that a relatively large number of mergers fail or at least provide inconclusive results on profitability from the perspective of the acquirer. (Galpin;Whittington;& Maellaro, 2012) (Campa & Hernando, 2004) (King;Dalton;Daily;& Govin, 2004) (Green;Barbin;& Schmidt, 2007). The reasons for the failures are as varied as the acquisitions themselves, but often the reason is due to the company being unable to deliver on the synergies that they promised at the announcement of the takeover.

Bower (2001) summarizes the issue very concisely: "We know surprisingly little about mergers and acquisitions, despite the buckets of ink spilled on the topic. In fact, our collective wisdom could be summed up in a few short sentences: acquirers usually pay too much. Friendly deals done using stock often perform well. CEOs fall in love with deals and don't walk away when they should. Integration's hard to pull off, but a few companies do it well consistently." We will focus on the post-acquisition integration in this thesis.

Dalton et al. (2004) performed a meta-analysis of the different methods of studying the performance of mergers and find that "despite decades of research, what impacts the financial performance of firms engaging in M&A activity remains largely unexplained". On the other hand, Haspeslagh and Jemison (1987) suggest that the entire value creation of a takeover happens in the post-acquisition period.

Studying the post-acquisition efficiency of a takeover is vital, as it is the stage at which the actual value of the M&A activity is created. As was stated before, there is no simple or clear way, or a

roadmap if you will, on how the post-acquisition integration of a merger or acquisition should be executed. It should be noted however that if integration synergies are gained, then the combined company can indeed exceed the sum of its parts and be more profitable than ever. This of course requires the presence of synergies and their successful utilization, and as was stated before by Bower (2001), these synergies and integration are difficult to acquire, but some do it consistently. This in itself gives credibility to the existence of synergies but does imply that they are also relatively rare and highly situational. The integration process of the acquisition is connected to the performance of the acquisition as stated by Zollo & Meier (2008) and the motivation of the acquisition is what dictates how the integration process should be implemented, but neither of the two exist in vacuum and separate from the relationship of the companies in the industry value chain. Below a picture of the theoretical framework of the thesis is presented. The framework attempts to capture the authors view on what the acquirer needs to take into account when an acquisition is planned..



1.2. Research questions and delimitations

This study is an explorative study that will attempt to form a link between the theory on post-acquisition performance and two different cases of acquisitions in the video game industry. As was commented in the earlier chapter, the post-acquisition phase is the part of the acquisition during which the value-creation and synergies of the acquisition can happen. This idea is further reinforced by Zollo & Meier (2008) who drew a logical link between different measures of acquisition success and

the integration process, or task level of the acquisition. In other words, the acquirer needs to have a plan as to how to gain the synergies that are potentially in the acquisition, and these synergies need to exist between the two firms. The integration process on the other hand is directly linked to the motivation and form of the acquisition, therefore we will choose acquisitions, that are differentiated by the level of synergies that the acquirer hopes to gain from the acquisition.

Therefore, the first research question is:

- Is there an observable difference in performance in acquisitions in the video game industry between financial and strategic acquisitions?

To clarify, Activision-Blizzard and Microsoft have been chosen as the case companies for the analysis. Activision-Blizzard is a clear video game publisher, and it is their core-business. On the other hand, Microsoft is a large corporation that has a branch called Microsoft Studios, that manages their video game business. What the study is meant to answer is whether there is a clear difference between a firm that is dependent completely on the video game industry for their survival or one where it is one of the many segments that the firm operates in. The second research question is:

- Can sustainable growth be acquired in the video game industry with acquisitions?

If the company can make their operations more efficient while achieving revenue growth, then financially sustainable growth is possible through the use of acquisitions in the video game industry. It is hypothesized that growth and efficiencies are more visible in acquisitions that are more strategic in nature. This is due to the fact that such acquisitions have the simultaneous incentive to keep the firm acquired as well off as possible and fit the position of the target to their own operations and strategy.

It should be noted, that accounting measures carry with them many limitations, as have been pointed out by Thanos & Papadakis (2008). The chief amongst the limitations is the fact that they contain noise, meaning that it is difficult to sort out the other issues that affect the figures in the company's financial statement. If for example the company engaged in many costly projects at the same time, it is difficult to determine which were the ones that affected the figures, and also filtering out the effects that are desired in the analysis is extremely challenging. This requires a comprehensive understanding of the business and what has occurred in the time-span that is being observed.

The second limitation is involved with the case study. The results of a case study cannot be projected to a population, meaning that one cannot deduce how other companies in the same industry would

behave or what effects they would incur in the same situation, on the basis of a case study. However, a case study can be used to test a theory. (Yin, 1994)

1.3. The structure of the thesis

The structure of the thesis is as follows. In the literature review, prior literature on types of acquisitions, synergies and the integration process operations will be reviewed. Next, we will discuss the methods of measuring acquisition success and how performance in different aspects of the company have a causal link in the event of an acquisition. Finally, we will review the history and current structure of the video game industry in detail

In the theoretical review, we discuss the relevant prior research on acquisition-post acquisition integration and success. We will also review theory on the psychology of the employee during an acquisition and how this affects innovation. This is relevant due to the fact that the video game development industry is highly dependent on good programmers. The post-acquisition operations and the integration process can cause unwanted excess stress to the employees, which in turn may lead important and valuable people to exit. If the motivation of the acquisition is to bring synergies or in some other way create efficiencies between the two companies, it would be counterproductive to not design the integration process to be as good as possible, in order to also keep the people who, create the product of the company.

In the fourth chapter, the methodology of the thesis is described. The research method of choice of the thesis is case study. Case study is useful for studying phenomena, which are not straightforward and highly complex. The performance between the case firms chosen will be measured with accounting measures. Accounting measures are a popular method of measuring the performance of acquisition and have the advantage of measuring real and occurred results. Return on assets (ROA) and revenue growth have been chosen as the measures.

The analysis chapter will present the two cases in detail. The cases chosen are the acquisition of King Entertainment by Activision-Blizzard and the acquisition of Mojang by Microsoft. The background of the acquirer and the target will be described to build a clearer picture of the issues and motivations that lead to the acquisition and the measures described earlier will be utilized to determine performance. The value of the measure before the acquisition will be compared to the value one year after the acquisition.

Finally, in the conclusions chapter the contents of the thesis will be reviewed, and the results of the analysis will be described. Future research questions will also be discussed.

2. Literature Review – Mergers and Acquisitions and the video game industry

Mergers and acquisitions have been a consistently popular method of achieving corporate growth or restructuring, even in times of economic downturn. At the same time the significance of its scale has also attracted the interest of scholars in different fields, such as strategic management, organizational behavior and corporate finance literature for decades. Acquisitions are also a very complex phenomenon, and the conditions under which they destroy and create value are not entirely clear. (Datta & Grant, 1990; Haspeslagh & Jemison, 1991; Sirower & Byrne, 1998; Bower, 2001; Ellis & Lamont, 2004; Dalton et al., 2004; Zollo & Degenhard, 2008; Thanos & Vassilis, 2011)

In this section, prior research on mergers and acquisitions will be addressed. The different types of acquisitions, benefits and synergies gained and also different ways of measuring the success or failure of acquisitions will be reviewed. The framework introduced by Zollo and Meier (2008) will be utilized in describing the interconnectedness of the different levels at which the process has to succeed.

We will also introduce the history, different developmental phases and contemporary structure of the video game industry. This is done in order to build a clear picture of the relationships between the different companies operating in the sector and to understand the value chain and roles. This in turn will shed light on what the different integration approaches in the sector are.

2.1.1. Types of acquisitions

The process by which the stocks or assets of a corporation come to be owned by the buyer is called a corporate acquisition (Reed & Lajoux, 1995). A merger occurs when a corporation is combined with and disappears into another corporation. This is a strictly legal definition and has nothing to do with how the bought corporation is controlled or operated in the future. As can be seen, the difference between a merger and an acquisition is simply that a merger is a “narrow, technical term for a particular procedure that may or may not follow an acquisition”. (Reed & Lajoux, 1995).

Acquisitions can be grouped by the intent of the buyer. Normally there are two kinds of buyers: ones who look to buy something to operate as a part of a larger whole, and those who seek a stand-alone investment. These two cases can be roughly divided as either a strategic acquisition or a financial

acquisition. In the former, the buyer already operates a company with a core business and wishes to strengthen, extend and build-up its existing operations. In the second case, the buyer is usually an investor or a group of investors, who may not care about the interrelationship of the bought business with their prior holdings at all. In fact, to them it may be beneficial for their holdings to be as diversified as possible, in order to minimize risks. They are primarily concerned whether the target will generate the cash flow repay the purchase price and permit them to turn a profit on their investment. In some cases, this profit can come in the form of dividends, or even through resale of the whole or parts of the bought company. (Reed & Lajoux, 1995)

This categorization can help determine what is the efficient way to conduct an acquisition between two companies. Should synergies be present, a strategic acquisition where the target is integrated in to the buyer is warranted. In this scenario the variables that need to be accounted for are the speed of the integration and the level of autonomy that the managers of the target enjoy after the integration has been completed, among other things. According to Reed & Lajoux (1995) the level of integration should be as high as possible, if the possible synergies are high. On the other hand, if there are synergies, but they are not high, then it should not be too vital for the integration to be of such a high level.

How the two companies are related to one another is also a thing to be considered in an acquisition. When the combining companies are in the same business and industry and on the same level of the value-chain, the acquisition is called a horizontal acquisition. In this scenario, the two companies usually have the same customers and their products are usually similar. Often the two companies are competitors in the same industry. This can be an efficient way to increase market power and integrate operations that management is already familiar with to their own. Horizontal acquisitions are also between companies that are always inevitably related through their business, and this has been seen in the literature as a factor that can help the integration between the companies and the acquisition in general to be successful. (Sing & Montgomery, 1987; Reed & Lajoux, 1995; Homberg et al., 2009)

Vertical acquisitions happen between companies that are in a related business and on different levels of the value-chain. Reed & Lajoux (1997) explain that in vertical integration, the purpose is to achieve efficiencies in purchasing, sales and distribution. It can further be divided in to vertical backwards integration and vertical forwards integration. In vertical backward integration, the buyer wishes to acquire their current or potential supplier. This can potentially mean increased sales for the acquired entity and increased profits as the company rides down the experience curve. In other words, the acquiring company wishes to own their supply-chain in such a way that in an extreme case, they can produce their product from scratch. This could potentially reduce risks in an unexpected shock in the

market affecting their products, as they would not need to negotiate with independent suppliers. On the other hand, the primary disadvantage of this strategy is the loss of efficiencies generated from competitive bidding.

As can be expected, vertical forwards integration is aimed at the opposite side of the value-chain. In it the buyer wishes to acquire the company that buys their products. In this case the buyer wishes to own their distribution channel, for example to prevent congestion. Reed & Lajoux (1997) continue that a primary theoretical benefit of vertical integration, is improved quality control in different parts of the company's supply chain. In an industry with a high level of technology, vertical integration can pay off in an increasingly better product produced at lower costs. This can for example be because materials and parts can be produced to an exact fit, neither overengineered, which can cut to profit margins, nor under engineered which can create assembly and service problems. Research and development, product engineering, product planning, distribution and service functions can all be a target of improvement in vertical acquisitions.

An interesting borderline case between a financial acquisition and a strategic acquisition is the conglomerate acquisition. A conglomerate is a company that is involved in many different industries and all these operations are integrated to their hierarchy. As such, the difference between a company and a conglomerate is simply that the latter has chosen to operate in different industries. (Maksimovic & Phillips, 2002) It should be noted that strategic synergies do not occur in conglomerate acquisitions, as conglomerates involve a combination of firms that produce unrelated products/market diversification. As such, these products have neither complementary nor the supplementary characteristics that synergies usually involve. The main rationale behind engaging in conglomerate acquisitions seems to be diversification, and the division of risks for the management and the shareholders.

Conglomerate acquisitions are a controversial subject in M&A literature. Among the merger waves that have occurred in the past century, the merger wave of 1960 was focused on companies merging to form conglomerates (Matsusaka, 1993; Hubbard & Palia, 1999). According to Reed & Lajoux (1995), during this time many analysts attempted to create workable strategies to help the progress of diversification. However, the merger wave of 1980 was mostly focused on deconsolidating the formed conglomerates, meaning that many of the conglomerates formed during the 1960's were dismantled in the following merger wave. During this merger wave it was not uncommon for the assets of a diversified target to be sold off to management in firms in related industries, meaning that it further spurred horizontal acquisitions and mergers. (Matsusaka, 1993)

At the other end of the spectrum, where there are no synergies between the two companies, it makes no sense at all to conduct an integration of processes, and the acquisition should be seen as a purely financial investment and treated as such as well. An investment of this type can be very profitable for the buyer and it might theoretically cause the buyer to be more objective in valuing their acquisition, and then determining terms that are more practical from a profit point of view. It should be noted, that financial acquisitions and conglomerate acquisitions described before are not the same, although they have many similarities. As was stated before, the aim of the conglomerate is to diversify their business. Financial acquisitions can be engaged in for a multitude of other reasons, but they are not necessarily motivated by the need to diversify the company's business and therefore the risk of their owners/share-holders. (Reed & Lajoux, 1995; Ellis & Lamont, 2004)

2.1.2. Benefits of acquisitions

Haspeslagh & Jemison (1991) state that acquisitions can transform firms and contribute to their growth and renewal. They can be integral in renewing market positions at a velocity not possible through internal development. Existing capabilities can be leveraged to more significant positions and they provide access to benefits from combining assets and sharing capabilities that are not obtainable through conventional partnerships and alliances. More importantly, they can bring new capabilities and ways of thinking in to the firm, that can challenge the existing order and offer new approaches to renewal and growth.

Synergies are a major reason why companies engage in mergers and acquisitions. When an acquisition creates synergies, it permits the combined entity to function better or more profitably than the separate entities could have, essentially allowing $1 + 1$ to be greater than 2. Essentially, synergies occur when the two combined companies can either reduce their costs or increase their revenue. To further elaborate, their combined revenue must be greater than their revenues would be when separate, and their costs must be lesser when combined, than their costs would be if they were separate. Synergies are especially important in case of mergers and should no cost or revenue benefits exist, it would make no sense at all to allow them to happen. (Hayward & Hambrick, 1997; Farrel & Shapiro, 1998; Zaheer et al., 2013)

For example, let's imagine two stores that are situated relatively close to each other and sell the same product. These two stores are combined in an acquisition. If we assume that nothing else changes relative to the initial setting in the demand of the product sold, then it would be possible for the now combined company to reap synergy benefits through more efficient managing of their warehouse.

The combined company has more data on the demand of their product sold, so they could optimize the cycle of their warehouse to fit the demand patterns of their two stores. An example of a revenue synergy could theoretically be something as simple as the other company having a brand, that could be utilized in the sales of the products of the other company. If there is a fit between the brand and the product, then equipping the new product with the brand would lead to increased sales, and therefore synergy gains for the acquisition. (Reed & Lajoux, 1995)

The former is an example of horizontal synergies. Two companies that produce similar products gain cost efficiencies and market power from varying sources after the acquisition. Studies have also shown that if the larger firm involved in the acquisition has lower marginal costs, then a horizontal merger will improve the performance of the merging firms, even if there are no direct cost savings because the improvement occurs in an increase in prices. Also, the integration stage is expected to be less complicated in a horizontal M&A than in an unrelated M&A, which can be attributed to similarity in operations and activities of the two formerly competing firms. In the same breath, it is also usually assumed that realizing synergy in general may be easier, as the managers of the joint firm have a better understanding of the production and marketing of the combined firms. An increase in profitability through cost reductions may be easier to accomplish in a horizontal merger, as the rivals have a more chances to eliminate duplicate jobs and consolidate business operations and activities. (Reed & Lajoux, 1995; Farrel & Shapiro, 1998; Rozen-Bakher, 2018)

As was stated before, vertical M&A's involve firms that have a buyer and seller relationship. Due to the nature of the relationship between the two firms, there are fewer options from which the buyer can choose the target of their acquisition, there may in fact be only one choice that fulfill the requirements imposed upon the deal by the acquirer. The decision to acquire a company with this manner of relationship is likely company specific and may depend on the makeup of the two companies in question. (Meador et al., 1996)

Goold & Campbell (1998) state that vertical mergers and acquisitions can reduce inventory costs, speed product development, increase capacity utilization, and improve market access. In process industries such as petrochemicals and forest products, an efficient and properly managed vertical integration may yield particularly large benefits. Rozen-Bakher (2018) however continues that a buyer-seller relationship can however limit the possible synergies to be gained from the endeavor. They add however, that the ability to coordinate the flow of products and services from one company to the other contributes to the ability to improve efficiency, which results in profitability success.

The integration stage of vertical mergers and acquisitions is more complicated relative to horizontal mergers and acquisitions, due to the complexity of synchronizing the flow of products and services between the combined firms. This can limit the potential efficiency gains. Bhuyan (2002) corroborates this notion. They find that there is a significant negative relationship between vertical mergers and profitability. They believe that this is due to vertical mergers failing to create differential advantages, for example cost savings for the combined firm. Vertical mergers and acquisitions are more complicated than horizontal M&A's, they have limited synergy potential due to the relationship of the companies, but have the potential increase their profitability with efficiency gains. The integration stage may also be more complicated than in horizontal M&A's and may lead to difficulties in claiming the synergies after the acquisition event.

Conglomerate M&A's involve firms that produce unrelated products which are neither substitutes nor complements or supplements and are involved in different industries. The aim of such M&A's is often to diversify and reduce business risk. (Rozen-Bakher, 2018) As was stated before, the existing literature provides contradictory evidence as to the impact of diversification on firm performance. King et al (2004) claim that some firms may benefit from diversification, but on average most do not. Berger and Ofek (1995) studied the effects of diversification on firm value by estimating the value of a diversified firm's segments as if they were operated as separate firms. Their method found that diversification reduces value. According to their estimates, the loss of value is around 13% to 15% over their sample period (1986-1991), the value loss occurred for all firms of all sizes, and the effects were mitigated when the diversification was in related industries. They found further evidence for the conclusion that diversification destroys value by observing that the segments of diversified firms had lower operating profitability than single line businesses did. They also find that overinvestment is associated with lower value for diversified firms, and that the segments of diversified firms overinvest more than stand-alone enterprises do.

Rozen-Bakher (2018) deduces that the contradiction that exists in between the literature and the results may be due to the mixed effects in M&A success in conglomerate M&A's. They claim that the integration stage is likely more complicated and likely to fail as opposed to related M&A's, due to the products and services being unrelated in the merging companies. The great differences in the markets, products and geographic locations may cause issues in the integration phase, which in turn may erode possible synergy potential. It may also be more difficult to consolidate operations, human resources and physical assets due to the diversity aspect. This leads to the firm being unable to fully gain benefits in operating costs and will lower possible operating profits, which will in turn reduce profitability.

Interestingly however, the fact that the companies are unrelated by their operations gives them higher synergy potential, because of the ability to increase the market power of both firms. (Rozen-Bakher, 2018). They continue that this is likely due to the expansion in to different markets, which should lead to revenue growth, and in turn synergy success. The literature supports this notion and it may be possible to find complementary products in such acquisitions as well (Reed & Lajoux, 1995). Piske (2002) also notes that diversity can provide opportunities for synergy, generating new knowledge and upgrading a company's repertoire of response patterns to environmental changes, but the endeavor does hold risks.

Also, two potential financial benefits can occur in a conglomerate merger. Diversification may lead to increased interest tax shields from a higher debt capacity and the ability to multi-segment firms to immediately realize tax savings by means of offsetting losses in some segments against the profit of others. (Berger & Udell, 1998)

There is a great deal of debate as to how synergies are created between merging companies. It seems that horizontal and related acquisitions have been thought to be able to produce synergies with less effort than more complex relations between the parties of the acquisition. They are also seen to perform better than unrelated acquisitions and are less risky. (Reed & Lajoux, 1995; Singh & Montgomery, 1987; Rozen-Bakher, 2018) In their extensive meta-analysis, Homberg et al. (2009) analyzed the effects of relatedness, by dividing the factor in to four dimensions. These were business, cultural, technological and size relatedness. Moderate positive effects on overall acquisition performance stemmed from business and technological relatedness. Cultural relatedness displayed a strong negative effect on overall performance and size exhibited a moderate negative effect. Interestingly their analysis also showed that the sum of the relatedness factor that included all four dimensions showed no effect on overall acquisition performance, or that the effects were negligible.

From this it can be deduced that relatedness as a factor in and of itself is not an attribute that can predict that the acquisition will be successful. In their study, Seth (1990) find that different sources of value creation are likely to operate in different types of acquisitions. They also argue that value creation depends necessarily on the combination of characteristics of the two firms, rather than the those of each firm considered alone.

All in all, it seems that synergies and performance after the acquisition or merger event are affected by a great deal of variables and that the cumulative and separate effects of changes in these variables are highly complex. Potential synergies can be found in all possible forms of acquisition, although the nature of these synergies can differ greatly. It can be said that a linear model that can guide

managers to gain synergies from their M&A's does not and will not exist, as each acquisition is different from the other simply because the circumstances and parties involved are also always different. Prior research has helped identify the length and breadth of variables that have an effect of synergy capture and acquisition performance success, but one cannot achieve success simply by following their guidelines. A more in depth understanding of the business and industry in which are being operated is required. The difficulty of capturing these synergies is also different with each form of acquisition.

2.1.3. Post-acquisition operations

In this chapter we will discuss what happens after the event of acquisition or merger. First, the integration process will be discussed. We will determine what integration is in a merger of acquisition and what are the usual procedures involved in it. We will discuss its drawbacks and advantages and the circumstances in which it is seen as warranted and how different levels of integration can must be considered on situational basis in an acquisition. In an acquisition, there is very likely at least some form of integration despite the motivations behind the deal. We will familiarize ourselves with how the proper level and scale of integration is measured, and if there are any ways to generalize the necessary level of integration. Second, we will also study the subject of when the deal in question does not necessitate a formal integration and if it is in fact not something that even the buyer desires from the deal. We will discuss how the post-acquisition operations are handled in these cases, and what the collaboration between the two companies is like.

Value creation happens only after the acquisition at which point the capabilities are transferred and people from both organizations collaborate to realize the potential benefits or to discover others. The collaboration relies on the will and dedication of the leadership of both organizations, focused on working together towards the new strategic task. Firms unfortunately often forego the benefits of an acquisition by focusing too much on a predetermined path and avoiding changes in the acquired company to minimize resistance. "The key to integration is to enlist the participation of necessary people without compromising the strategic task". (Haspeslagh & Jemison, 1991)

Integration is the process how the companies involved in the acquisition attempt to make the combined company acquire as many of the benefits owed to either company, where the firms cooperate to reach the acquisitions purpose. (Haspeslagh & Farquhar, 1991; Piske, 2002; Ranft, 2006; Kato & Schoenberg, 2014) According to Haspeslagh & Jemison (1991), the synergies that occur in the integration of two entities result from interactions between people from both organizations. The

executives responsible for an acquisition must demonstrate how it can benefit the firm's competitive position and create value. This can include sharing resources between the firms, transferring skills among business functions, improving the general management of the company or providing the firm with more influence in its markets or with suppliers. Synergies often occur at the middle management and operating levels, where work actually gets done after the two groups come together. The synergy opportunities are often difficult to predict before the event. Haspeslagh & Jemison (1991) quote a bank's senior planning officer addressing the problem: "As soon as the acquisition looked like a "go", we quickly prepared a set of synergy arguments for the board that made sense prima facie. It turned out that none of these ever amounted to anything. The only ones that seemed to work were those that came from the middle management guys."

As has been stated before, the integration phase is the phase in which it is possible to attain the synergies and create the value that companies hope to gain with the merger. The body of literature which is concerned with post-acquisition integration has a threefold objective: Describing the integration actions pursued by managers, to understand the impact of these actions on the acquiring and acquired firms, and to explain how the process leads to value creation. (Birkinshaw, 2000)

Birkinshaw et al. (2000) make the distinction between task integration and human integration in their study on post-acquisition integration. Task integration is related to the process perspective of M&A studies, which is focused on the actions taken by the management to guide the post-acquisition integration process. It views value creation as the objective of the acquisition, measured in terms of transfer of capabilities and resource sharing. Human integration is related to the organizational behavior perspective of M&A studies. It is focused on the behavioral implications of acquisitions, at both the individual and organizational levels and its consistent theme is that the "human side of mergers and acquisitions" is consistently neglected by managers intent on completing the deal and realizing operational synergies. Human integration is primarily concerned with generating satisfaction and ultimately a shared identity, among employees from both companies.

They continue that these two concepts are conceptually distinct, but that they are interconnected and not independent of one another. Aspects of human integration, such as better employee satisfaction, are likely to make capability transfer and resource sharing easier; task integration is likely to further employee satisfaction and shared identity. These two can however also diverge, which can lead to a failed or partially failed merger. Task integration can be achieved at the expense of human integration and vice versa. A merger that has been implemented quickly can lead to a more consistent organization, but where morale has dropped on both sides of the organization and the employees of the other party are viewed as invading enemies. It is equally possible that human integration can move

ahead of task integration. The need to alleviate concerns by carefully communicating and confirming what will not change to the employees and managers of the acquired firm, can lead to a successful acquisition from the perspective of employee satisfaction, but one that does not create the operational synergies that were required (Haspeslagh & Farquhar, 1991).

This discussion implies that a relative emphasis on either one perspective can lead to underperformance in the other, and therefore a significant negative impact on the outcome of the acquisition. If task integration is focused on to the detriment of human integration, then synergies are achieved at the cost of employee motivation. Should employee motivation be overly focused on, then the result is satisfied employees, but possibly no operational synergies. For the process of integration to be successful, the two sides of the integration must both be effectively implemented.

Birkinshaw et al. (2000) studied three separate acquisitions from the perspective of task and human integration and received results that contribute to understanding how the managers of acquiring companies execute integration from these two perspectives. The acquisitions that they studied were all disposed towards absorption of the acquired companies, so they expected to see actions geared towards the realization of operational synergies. This was however not the case, even though the acquirers understood the need to achieve operational synergies.

In all three companies they studied the task integration that was desired was not achieved to the extent that was planned at the start of the acquisition, nor was it gained at the rate that was planned either. It was striking that in all the cases it was clear that the decision to not pursue integration more aggressively was made with a good reason. Fear of losing key people, caution in integration due to the hostile nature of the acquisition and subsequent hostility of the employees in the acquired company and the need to allow developmental engineers to pursue parallel projects instead of imposing a centralized solution or delay projects even further, were all valid reasons to not push integration harder.

Their findings indicate that there is a fine line to tread, when attempting to gain operational synergies in acquisitions. Even if clear operational synergies exist between the merging companies and an efficient plan of integration is in effect, managers view that synergies cannot be acquired if key talent leaves. On the other hand, to satisfy the key talent to not leave can possibly lead to synergies being not realized after the acquisition.

It also underlines how complex the interactions of different variables involved in the integration process are. Puranam et al (2009) find that the likelihood of task integration is greater, if the acquisition is characterized by a higher level of interdependence associated with buying component

technology, rather than with buying an entirely new product line. Zaheer et al (2013) studied the appropriate level of integration in acquisitions. In their study, they find that integration and autonomy, in the context of an acquisition, are not the opposite ends of a continuum. Certain conditions may lead to high levels of both integration and autonomy.

2.2. Measures in determining acquisition success

Zollo and Meier (2008) examined the concept of acquisition performance. They had three major findings. First, performance in mergers and acquisitions is complex, it is not possible to find an overreaching factor that captures all the many ways to proxy it. Second, there is a way to link integration process performance to long term financial performance (with both accounting and financial returns) through customer retention and overall synergy realization. Third, short-term window event studies are not linked to any other performance metrics. They further continue, that as acquisition performance is a very complex subject, a simultaneous use of multiple measures is called for in order to gain a satisfactory understanding of acquisition performance.

In this thesis we will focus on accounting measures to determine how the firms performed after the acquisition. Zollo and Meier (2008) analyzed 88 articles between 1970 and 2006 and identified 12 distinct approaches to measuring acquisition success. The largest (41%) group of studies used short-term window event studies. Using financial market data, an event study measures the effect that a specific event has to the value of a security. Assuming the rationality of the marketplace, the effect that the event in question has on the value of the security should be seen in a relatively short time period. (MacKinlay, 1997) As strong second come long term accounting measures (28%) and at the third place (19%) were long-term window event studies. These three were followed by measures of synergy realization or realization of strategic objectives (14%) and studies explaining the variance of integration process measures (9%). The rest were single studies and as they are not relevant to this study, they will not be further elaborated on.

Although short-term window event studies took the lion's share of studies that used them to measure acquisition performance, there is a long-standing debate on the use of short-term versus long-term windows. The short-term reaction of the market to the acquisition can differ from the long-term results and there is widespread evidence that the market does not react efficiently to the likely wealth gains from complex transactions such as acquisitions. (Barber & Lyon, 1997; Houghran & Vijh, 1997) Several studies have indicated that there exists decision-making bias and cognitive simplification in the heuristics related to the type of acquisition, rather than the real information on

the economic value generation from the transaction. The phenomena is fundamental, and even experienced researchers are prone to biases, for example with the tendency to predict an outcome that best represents the data available with insufficient regard for prior probability. There is a possibility that the variance in the stock price of the companies involved in an acquisition may simply be the collective bet of the entire stock market. (Tversky & Kahneman, 1974; Schwenk, 1984; Duhaime & Schwenk, 1985)

Accounting measures have also been a popular method of measuring M&A success. (Bruner, 2002; Zollo & Degenhard, 2008) Thanos and Papadakis (2011) argue that management scholars have relied on them for three reasons. First, accounting-based measures of performance measure actual, realized performance, as reported in the annual financial statements of the firms. They also point out that there lies the potential advantage over and above other ways of assessing M&A performance, such as the cumulative abnormal returns in event studies, which measure investor's expectations for the future.

The second advantage is that they can measure different aspects of M&A performance. As an example, return on assets (ROA) is a measure of a firm's profitability, while return on sales (ROS) is a measure of a firm's efficiency and growth in sales is a measure of a firm's effectiveness. As such, when multiple accounting-based methods are combined in a single study, a researcher can obtain a more integrated view on M&A performance. Third, a major motivation for conducting M&A is to find and exploit potential synergies between the acquirer and the target firm in the long term. If such synergies exist, they will appear as long-term accounting performance improvements. Therefore, by taking advantage of accounting-based measures, scholars can evaluate the realization of synergies Hitt et al (1998) for example chose to use accounting measures, because they felt that market measures failed to identify potential synergies due to information asymmetry. Finally, a good amount of existent management literature has attempted to find the factors explaining M&A success. A common practice is to create a survey and request managers to describe their perceptions on what these potential factors may be. As a dependent variable accounting-based performance measures are often used. This is a way of overcoming problems associated with common method bias. Surveys often provide information used to measure both the independent and the dependent variable of an analysis and in such cases the estimated effect of one variable on another is at risk of being biased because of common method variance; that is, systemic variance shared among variables among the variables, which is introduced to the measures due to the measurement method rather than the theoretical construct of the measures (Jakobsen & Jensen, 2015). This can have a negative effect on the quality of the findings and accounting data can help remedy the bias. Barney (1988) presented a very compelling argument: for an acquirer to gain abnormal returns from synergies in an acquisition,

these synergies need to be private and unique, inimitable and unexpected. In other words, the possible synergies that have been seen to be available by the management, need to be kept private. From this, it follows that the stock market needs to be unaware of them as well, and therefore it would not be seen in a short-term market-based measure. This argument further supports objective, accounting based measures. (Thanos & Vassilis, 2011)

Relying solely on accounting-based methods has its drawbacks. First, aspects of nonfinancial performance are not captured by accounting measures. As M&A are a multidimensional and complex process, which refers to both financial and nonfinancial performance, the knowledge provided by accounting-based measures are inherently incomplete. Second, using accounting-based methods has often been justified on the ground that the only strategic objective of every business is to improve profitability, and therefore M&A would also be driven only by economic motivations. Research suggests however that other motivations, such as managerial hubris and personal motives may drive M&A as well. Unfortunately accounting based measures are unable to evaluate them as well. (Zollo & Degenhard, 2008)

Third, accounting measures, especially the ones that have been mentioned earlier, refer to the firm level. They measure overall firm performance and not the performance of isolated acquisitions. This is a major limitation, which becomes especially relevant in cases where the acquiring firm proceeds to multiple acquisitions in a short period of time. These acquisitions create noise in the data, that makes it very difficult to find out which acquisitions caused what manner of performance. Fourth, as there exist a great deal of different accounting measures in different studies, comparison between these studies is difficult. Tuch and O'Sullivan (2007) point out several reasons for this. Among them are the susceptibility of accounting measures to be the target of managerial manipulation through earnings management and also the difficulty of ascertaining a valid combined performance measure for both the bidder and the target, as the target will cease to exist or remains an independent subsidiary for the bidder. Fifth, accounting measures rely on the reliability of the financial statements on which they are based. If the financial statements are not reliable, then the accounting-based measures do not provide reliable information either. Finally, as accounting standards can differ from country to country, this can raise serious concerns over the comparability of accounting data. This should especially be kept in mind when evaluating cross-national acquisitions.

In sum, different methods of measuring the performance of a firm under any circumstances requires that the manager or the scholar that does the measuring remains sensitive and vigilant to the limitations of their chosen metric, and also the practical environment through which they make judgements according to these measures. In the case of mergers and acquisitions this is even more

true, as the event that is being observed is very likely too complex to be measured by a single method. A great deal of the articles that have been mentioned in this chapter confirm this notion, and often suggest that one should employ more than one metric in order to make an accurate judgement when assessing the performance of an event like an acquisition. The fact remains however, that even after decades of research, there is no consensus as to how to measure acquisitions accurately, and that most methods contain serious drawbacks and uncertainties. This is the reason why a more subjective approach has been chosen for this study. For that purpose, the following chapters will thoroughly analyze the video game industry itself, as to gain a subjective understanding of the video game industry itself. This information will then be used in concert with acquisition research and theories to assess different business cases in the industry involving acquisitions.

2.3. The videogame industry

In this chapter we will present an introduction to the video game industry and its history. We will go over how video game industry started, what developmental phases it has had and what its present stage is. The focus will be on building a picture of what kind of industry the video game industry is in a business sense, and how it differentiates itself from other knowledge and technology intensive industries. After we have determined the current situation and general nature of the video game industry, we will tie the concepts of the earlier literature review to the target industry. We will go over how typical acquisitions in the industry would fit in to the horizontal, vertical ja conglomerate framework and determine what the what the possible synergies would be.

2.3.1. Introduction and history

The video game industry has developed from a niche market to a large market power over the course of its history. It has operated for over 30 years and the first home video game console was put in to distribution in 1972. (Dillow, 2011) The video game industry develops, publishes, manufactures, distributes and sells electronic game devices software and other miscellaneous accessories. Originally, the video game industry referred to computer gaming on a raster display, at which the resolution was based on the number of pixels the image on the screen contained. In the past few decades however, the development of more advanced technologies, among others the breakthrough of 3D polygon imagery pioneered by Silicon Graphics institute, it can now be used to refer to any type of display device. (Lysenko, 2007; Holger et al., 2008)

The inception of the industry lies however at computer games, and the earliest reported games of the 1940s and 1950s were housed within massive custom-built machines intended to showcase the capabilities of computers. The computers of the time could only run a single game for which they were built, and the games were very simple. With the evolution of computers, video games caught the interest of the public as a form of entertainment. (Laakso & Nyman, 2014)

In fact, the first products that could be defined as video/computer games followed the same pattern of the software or the game itself being inseparable from the medium or the hardware. As was mentioned before, the first games were solely on computers and even when these computers became more prevalent, they were few and far in between and incompatible with each other. This of course meant that the few games they had were also incompatible with other computers, even if the computers were not solely used to play the games. (Laakso & Nyman, 2014)

An interesting example was an early favorite game called Space Wars, which was released in 1962. It was one of the earliest digital computer games and it could not be run with any other computer than the PDP-1 computer. Interestingly, it made the PDP-1 famous, which can be seen as an early indication of the power of video games in steering the consumer. What should be kept in mind however, that the computers of the time were not products that could be purchased by households en masse, as they were still too expensive to be used for simple home use or entertainment. They were used mostly by research scientists and corporations at the time. (Laakso & Nyman, 2014)

In this way, the video game industry is a good illustration of how a completely new and diverse technology is being slowly implemented over the years. Computers slowly but steadily moved from being used by scientists and businesses, to the modern iteration where most people in the western, and in fact the entire world carry a miniaturized computer with them in their pockets. Laakso & Nyman (2014) continue that this push was further facilitated by increased standardization in the industry.

They continue, that this happened in the 1980s with the introduction of IBM-compatible computers, all of which could be run on MS-DOS. This development had a massive effect on game development. As platforms, computers are effectively the most flexible among the choices as there are multiple possible producers for every major platform, and therefore users could mix their choice of hardware as they saw fit. The status quo is relatively the same regarding computers, as most are currently built utilizing the x86 processor and the operating systems that are being used have also stabilized.

The next developmental phase of the increasing popularity of video games were facilitated by arcade games. They were used in arcade halls and were huge boxes that were designed to accept coins in

exchange for a fixed number of times to play a specific game. Relatively quickly, these boxes were developed to be more modular, meaning that the games inside were made to be able to be replaced, thus improving logistics and lowering manufacturing costs. Arcade halls still exist of course, but the next major step in the history of video games came from advancements in both computer technology and video game consoles. (Laakso & Nyman, 2014)

As can be seen, the video game industry is still a relatively broad concept and it should be noted here that the focus of this thesis is specifically on computer, console and mobile games and the companies that are involved in their production and publication. We wish to limit the products that are being indirectly observed in to such that the consumer can buy and own them, as opposed to renting or using them in a public area.

The first video game console was published in 1967. It was designed by German-born television engineer Ralph Baer and his co-workers, and it was the first predecessor of the modern video game console, as it was the first to function with a standard television. They drew up schematics for what they called a “chase game”, built a vacuum-tube circuit that connected to a television and allowed two players to control two squares chasing each other on the screen. They eventually added a light gun and developed twelve games to the console. (TIME, 2014)

It can be seen here as well, that the very first video game consoles had the same drawbacks as the first computer and arcade games, where the console usually only had a single game or perhaps a few more. This was long before the actual standardization of video game platforms consolidated. In terms of business, a significant development came from the release of the first systems in which it was possible to program games for further individual purchase. When compared to the earlier paradigm, where the console, computer or any other platform was intrinsically connected to the actual game or product, this meant entirely new business models and sources of income for platform holders. (Laakso & Nyman, 2014)

The first portable games were called game cartridges and they were popularized by the Atari 2600 published in 1977. This was an exciting time for the budding video game industry and Atari 2600 has become a cultural icon of the 1980s. During its peak, another important development shook the video game industry, which changed the dynamics of the industry greatly. This was third party development. As has been mentioned earlier, up until this point the hardware platform from which the games were played, were usually designed to only accommodate one game, or maybe a few. It also meant that the designer and builder of the platform also inevitably designed all the games on said platform. (Laakso & Nyman, 2014)

This was a precursor for how the industry would form, and currently in the relatively consolidated market of video games, it is the norm that the video game designers are separate from the console makers. It should be noted that this relationship was not completely rosy in the beginning and it seems likely that the problems faced by the different parties at this time would be seen to repeat later in different forms, not only in the video game industry, but also in software in general. With this we of course mean computer game piracy. (Barton & Loguidice, 2008; Laakso & Nyman, 2014)

The period after this is sometimes referred to as the golden age of the video game industry. The reason for the moniker was that market revenue for the entire industry saw a massive boost in 1980 as compared to 1979 and 1978. This was also the time during which video games became popularized in households and new games were being made more than was possible before. Developments in processor power and the addition of new technologies made it possible for the game developers to make games with higher-resolution graphics, better game-play and more games, which was what the customers clamored for. During this period, the demand for video games exploded to 60% greater than anticipated. (Miller, 2005; Langlotz et al., 2008)

This golden age was followed by a “dark age” which was not due to any reversion or stagnation of technology, but a significant drop in sales that started in 1982. This crash was caused by too many derivative and substandard game cartridges sold by too many manufacturers. During this period, many third-party game developers went out of business, and many already established companies lost money on unsold inventory. Interestingly, although the market crashed in the United States, it continued to thrive in Japan. (Miller, 2005)

During the crash, users began to switch from the video game market to personal computers or PCs. Computer companies started paying more attention to the hardware needs of games, when designing their computers. The first to produce computers suitable to gaming and game development were Apple and Commodore. They also implemented an advertising campaign that helped bring visibility to computer games all over the world. A major advancement in the field happened in 1996 with the development of the Voodoo chipset graphics card. It supported 3D graphics and was also affordable for home use. The powerhouse for the development of computer and video game graphics for the years to come would be the FPS-genre of gaming. (Plotnikova, 2017)

After the crash, the video game console industry recuperated by the middle of 1990 and consumers saw the release of consoles such as Sega Saturn, PlayStation and Nintendo 64, which began to support 3D graphics. Subsequently the popularity of arcade gaming had decreased from its peak and consoles likely saw an open position to use features that were traditionally involved with arcade halls. Many

of the games were sought to become more realistic by implementing new controllers like joystick or pedals in an attempt to imitate aircrafts or vehicles.

There have been plenty of technological improvements from the rudimentary 3D graphics and physics engines in the past years, but technically the environment of the video game console industry and the computer game industry has not changed radically in this sense over the last few decades. Two major advancements have occurred after this. One was the increase and popularity of online gaming and the second is mobile phone gaming.

The different technologies needed to make online gaming possible developed from as early on as 1960. Three specific innovations happen during 1960 to 1993 that contribute to the phenomena. First, host-based networks and time-sharing, which lead to the creation of the internet as we know today. This happens officially in 1983, after this online gaming becomes theoretically possible. 1989 is a big year for the internet and online gaming with the development of the IP multicast. Ip Multicasting is a communication mechanism in which the data is communicated from a server to a set of clients whom are interested in receiving said data. Clients may dynamically enter or leave communication. In 1993 the trial and error period of online gaming kicked off in earnest, with CERN releasing the World Wide Web in to public domain. This was interestingly also the birth year of the LAN-party, which is an immensely popular form of gaming today. (Himanshu, 2013; Datapath.io, 2017)

The following years were a time of trial and error for online gaming, where different parties, among them Sega, Nintendo and Atari tried to push online gaming forward get it right, and often failed as many aspects of the technology and the game components were incomplete. It was still simply too expensive and not quite fast enough to be feasible. The next major development happens at 1995 with the release of affordable Ethernet cards and Windows 95. These two events are the catalyst to online gaming. During the following years, we see many successful online games being published, amongst the Ultima Online, Star Craft, Diablo, Lineage and many others. The start of the 2000s can be seen as the final push for the popularity and success of online gaming, as a certain critical mass was reached with regards to the network effect of adopting new technology. This was due to a wider spread of internet all over the world. A great deal of new gamers apparently joined the online gaming community from China, as the Chinese government had recently banned consoles in the country. This change provided a huge shift towards interest in MMORPGs, or Massively Multiplayer Online Role-Playing Games. This means that a sufficient number of users were using a product that gained value from the number of consumers using it, in this case online games, and this led to a massive increase in popularity by itself. In other words, the value to each individual participating increase with the size of the network. (Saloner & Shepard, 1995; Hook, 2012; Datapath.io, 2017; Plotnikova, 2017)

This can be seen as the time during which online gaming began to develop to the form in which we can see it today. The technology is in place from the point of view of the gaming industry, and improvements involve the capacity and efficiency of the internet connection. We also see begin to see that the industry is beginning to get the recipe of online gaming right, as the games that were mentioned before are still active in by their sequels, and the fact that the genres that they represent still form a major bulk of the online games that are being played today. This did not include FPS-games, but among the games that took advantage of the internet during the 1990s were Quake and Tribes.

The most recent development in games are mobile phone games. Technically, there have been mobile games ever since the first mobile phones. It is very likely that the first mobile game that most people that have been born before the turn of the millennium is Snake on a Nokia phone. These are however not the games that launched mobile gaming in to the magnitude which is being experienced today. It is interesting to note, that the starting point with these games is similar to how games on other platforms started out. They were simple games that came with and were part of the programming of the mobile phone, and obviously could not be removed and no new games could be downloaded, as internet on mobile phones came a lot later.

The starting point in this case is the appearance of the first smart phones. With them, it became possible for users to download and install additional software on their handheld devices. There was a period before actual widespread adoption of software expansion, due to technological fragmentation and lack of possible methods of distribution and payment. Before the Apple App Store, Google play and Windows phone store, to install software on smartphones one had to side-load the installation files by first downloading them from the web, likely pay for them, and finally execute the downloaded files from a file manager. The standardization of the means of acquiring games and applications created a new and highly profitable market. (Laakso & Nyman, 2014)

Some significant changes happened in the gaming industry with the move to mobile devices. Improved access was among them, as games became much more readily available on non-dedicated gaming devices. Through this, many users that had not previously engaged in games, now carried with them a device that could be used to play such games. The increase in the bulk of gamers, and a more potential gamers, increase the demand and popularity of casual games. Business models also changed. As with traditional games, income was originally generated from selling the actual games. Among these were generating income through ads embedded to functions in the game or through in-app purchases, or micro-transaction. A combination of the two is also possible. (Laakso & Nyman, 2014)

The potential of the mobile game market is attracting developers of all sizes, to respond to the demand. Over 220 000 games were released on Apple iOS alone during the first four years of since its launch. This has made games the largest category overall in the entire store. According to Forbes, the most successful mobile games generate up to millions of dollars per day of income. Their rise has also been a significant generator of revenues for platform holders as well, as they get royalties for all sales. (Laakso & Nyman, 2014)

We have discussed the history and development of the video game industry to form a clearer picture of the general situation present, and also how the current situation has become what it is. Understanding the past can give profound insight to understanding the present. Technological development in the computer and electronic hardware industry has been vital in the development of the video game industry over its entire inception. Interestingly, computer and video games have also served to showcase the capabilities of new hardware, computers and other devices themselves. The entertainment value has been a bonus, although a welcome and extremely desired one. On the other hand, Laakso and Nyman (2017) quoted David Crane, the co-founder of Activision: “Man Will always use his most advanced technology to amuse himself”.

This quote is a well put one, as the industry has been in a tumultuous rise ever since the 1980s golden age. People have wanted to make new kinds of games and gamers have wanted new and novel ideas by which to amuse themselves. This has led varying genres of games and also very different levels of seriousness to gaming. There are extremely casual games such as The Sims or digital versions of popular board games such as Monopoly and Trivial. As was stated before, the advent of mobile games lead to an increase in games that are casual by their nature. Then again there are also games where an entirely unprecedented level of seriousness is present. During the beginnings of online gaming, people wanted to play different types of games competitively. Among these, the fps, strategy and rpg-games were the most popular.

People formed “clans” where a group player together as a team as allowed by context of the game. In FPS-games, the team usually played against other teams, and in strategy games the way of playing usually varied. An important development that these modes of playing online gave birth to, was the e-sports genre. This is a relatively new phenomena that has been growing and gaining new shapes in during the past decade. eSports is currently a noteworthy form of entertainment, and although it is not mainstream yet, it is gaining popularity especially among the younger generation. Curren(tly, the largest revenues from eSports are being generated in Asia with approximately 406 million dollars at the year 2017, with North America coming in second with 392 million dollars. The aggregate

revenues reported in 2017 for the entire eSports market was approximately 655 million U.S dollars. (WePC, 2018)

Another interesting relatively recent thing in gaming is live game streaming. Edge (2013) researched live stream gaming explain the phenomena in detail. According to him, the emergence of new technologies and competitors within the marketplace, have made it possible to use a variety of new streaming media content which target a wide array of traditional broadcast audiences online. “Streaming allows for a new type of social TV that provides an interactive platform for audiences to engage, on a personal level, with their favorite gaming personalities”. Increasing number of professional gamers and the fans that they attract, new platforms such as Twitch TV have created a new, internet exclusive marketplace which is not dependent upon traditional broadcasting methods.

Twitch TV was founded in 2011 by Justin Kam and was acquired by Amazon for 970 million U.S dollars. It is currently the n. 4 highest trafficking site online during peak internet hours coming right behind Netflix, Google and Apple. What should be noted here, is that the second youngest company in the group was listed 14 years before Twitch even existed. (Egger, 2015) According to their website, the most popular games can have an aggregate of up to hundreds of thousand viewers, this is divided per game, and therefore the numbers can include an unknown number of streamers and viewers per streamer. (Cook, 2014; Fast Company, 2018)

They have provided a way for gamers to indeed make money out of gaming, outside of the eSports scene, and have therefore helped with the inception of entirely new type of professional gamer. Streamers need to have a genuine passion for gaming, have some performance skills and charisma, an understanding and a knack for business and communication skills. (Alice, 2016)

As can be seen from these more recent examples, video games are branching out to different territories that normally have not been associated with video games: Entertainment and sports. The monetary amounts that is involved is not trivial, and people are capable of creating a livelihood for themselves by playing video games. This goes to show that from the business perspective, the frameworks and models used to evaluate a video game company’s possible value and future performance are no longer as simple as they were. This also means, that there are a great deal more possible thing to consider when considering for example an acquisition.

2.3.2. Structure of the video game industry

We have discussed the video game industry from a product perspective extensively, but we have not really dealt with the structure and status of the industry itself, from the point of view of the companies involved. Langlotz et al. (2008) conducted a structure analysis of the video game industry. According to them the video game industry is segmented in to 5 different vertical stages: Development, publishing, manufacturing, distributing and retail, and also in to two distinct arenas, which are software and hardware. Williams (2002) drew a connection to the book publishing industry, as firms in both industries choose to integrate adjoining stages, while others outsource, contract or work collaboratively to maintain their competitiveness.

According to Williams (2002), home video games fall into three separate but related market segments. These are video game consoles, handhelds and PC Games. At present time, the list is somewhat larger and according to Statista (2018), the list can be divided further to: TV/Console/VR, PC/MMO games, Smartphones and watches, Tablet games, Casual web games and handheld games. Mobile phone games and handheld platform games, like the Gameboy, are technically competing for the same manner of consumers and the games are relatively casual as compared to computer and console games. Nintendo had held complete monopoly in the handheld segment for a long time and currently the presence of a new platform for casual handheld games has challenged this. The games can be potentially more sophisticated on hand-held consoles, as the devices are specifically designed for gameplay, but mobile phones are cheaper, more widespread and have an app store that you can use to download the games you want to spend your time playing.

Console games represent the mainstream in video games. Their profit margins are high, and the game types are less diverse, than in for example PC games. The segment is marked by oligopolistic control at the hardware and software level, and by tremendous competition. Currently, there are three major manufacturers, Nintendo, Sony, and Microsoft, of which Sony is currently in the lead. Each console operates on a proprietary system, that is designed to run on software that is specifically designed to run on that console. In this we can draw a comparison to the beginnings of the industry, the standard of a platform specific games. (Williams, 2002)

What began to shape the console market in to what it is currently, was when in 1999 the previous generation hardware of 32- and 64-bit machines were replaced by a next generation of more powerful and capable ones, which very able to render graphics with a great deal more polygons on screen. This led to a heated battle for market share, but also with the incremental improvement of technology, it

also led to incremental increases in the cost of developing games, and also the platforms used. Their core strategies were based on the same business principle: The money is in the software, as development and manufacturing costs keep the consoles break-even price from most consumer's price points. This means that, if the consoles were priced at level where they would turn profit, the price would be above what most consumers would be willing to pay for the console. This is why the manufacturers need to sell them at a price where they incur losses. This in turn is motivated further by the network effect of product adoption and therefore a need to gain a large user base, whom own the proprietary console that each manufacturer is selling. The network effect refers to a phenomenon, where high expected sales lead to an increase in willingness to pay for a good. These network effects are common in markets where products need to be connected in a network, such as a telephone, or where ancillary products are needed to fully benefit from the original good, such as a dvd is required to use a dvd-player. Simply put, the more users the good in question has, the more value it generates to each individual user. In the case of consoles, this means an increase in the likelihood of more games that you enjoy being made, and also in the case of online games on that particular console, it means more gamers to play with. The competition between manufacturers is fierce, as each needs a critical mass of users to take advantage of the network effects and compensate for the losses incurred from selling the console platform at a discount. This notion has another side as well: they must also attract a network of developers, who need a platform on which to work with. These developers also need a platform that attracts customers, and no one wants to publish for a platform that is likely to perish. (Economides, 1996; Gallagher & Park, 2002; Williams, 2002)

As the entire market is divided between three competitors, there would seem to be a risk that these three would take advantage of their combined market power and form a cartel that could determine the prices in the entire market to the detriment of the consumer. Williams (2002) used a Herfindahl-Hirschman Index to determine the effects of the market shares of the different manufacturers. The Herfindahl-Hirschman Index adopted in 1992 as a means of measuring market concentration for purposes of antitrust analysis (Laine, 1995). The index is the sum of the squared market shares for each firm, where numbers over 0.18 represent a significant market concentration. In Williams's (2002) study, the value of the index was 0.40 for the year 2000. The reason for the fact that this is not very likely worrying, is because the video game industry is a standard-based industry. Gallagher & Park (2002) state that in a standard based industry, an existing installed base of products is a potential competitive advantage, and firm therefore have greater motivation to compete for market share. From this it follows, that strategy concepts that center around developing market share and mass acceptance of products, such as economies of scale, first mover advantage and technological innovation are

featured with great prominence in these industries, as compared to others. This means that console manufacturers do not have incentives to work with each other, as they are all fighting over network effects. As in this case one firm's gain is another firm's loss, any cartel-like behavior should not even come into consideration for the firms. (Williams, 2002)

The profits come from the software side through the use of licensing agreements with developers and publishers, and through contractual obligations to manufacture the software using the firm's plant. Game developers outside the manufacturer's organization that create games for the platform are required to pay a licensing fee, and publishers are also required to manufacture the physical copies, if any, in the manufacturer's plant, as was stated before. Historically, manufacturers have risen to the top of the ladder in the industry but have come tumbling down due to either failing to keep up to quality standards, or by abusing their market power. The video game crash of 1980 was due to Atari abusing its market power but failing in quality control. In 1990 Nintendo was leading the market, but the unfair conditions it imposed on developers and publishers caused it to be passed by Sega in the early 1990s, and the same was done to Sega by Sony in the mid-1990s. Sony's continued success may be attributed to their ability to grow a significantly larger title library through more attractive deals with developers. Success in consoles has historically been a consequence of establishing a large base of titles for the system through an established network of developers, brand recognition and a hit game. (Williams, 2002)

Consoles have held the mainstream market of video games, while the smaller PC market has represented the "vanguard of imaginative programming, risk taking and fringe products" (Williams, 2002) The market is populated by many of the same players/consumers as the console game market, and it operates similarly, but the business logic and the product is much different. As the architecture for home PC's is open and available to scores of manufacturers, the market is largely free of proprietary restrictions and manufacturer licensing fees that accompany consoles. This means that no one company has been able to integrate their firm in both hardware and software, with which to leverage competitors. Barriers for entry are also lower for developers, as unlike console development, which requires a "development kit" which can cost up to 20 thousand U.S dollars, PC-games require only a capable desktop computer and manpower. The average costs for PC development and marketing are therefore understandably lower, than in console games. This has spawned a great number of operations with different competence levels and a huge amount of titles. PC games have their own drawbacks as well. Most notable third-party video cards need to be programmed and tested for individually for each game, among other non-standardized advances in home computers. Due to

these issues, many developers prefer the stable environment and well-defined parameter of the console market. (Williams, 2002)

The console game market has historically been the largest of the game markets, but in recent years its first place is threatened by the mobile phone game market. According to Statista (2018) in 2018 console games generated 27% of the revenue of the games market, while games played on smartphones and watches took up to 32%. If you add the category of Tablet games (10%) to the mobile games aggregate, then these types of games have overtaken other platforms by a huge leap. In these statistics, the shift towards more casual games can be seen very clearly, as was discussed earlier. Handheld games and Casual Web games hold a very small percentage of the entire market, while PC games and MMOs have taken a steady but lowering quarter of the entire market share.

As was stated before, the game industry can also be divided into five vertical stages. Development, publishing, manufacturing, distribution and retail. For the purposes of this thesis, we will focus on the relationship between the publisher and the developer. As the platform owners are vital in understanding the structure and interrelationships between the different levels, they will also be focused on, although a great deal of their influence was already explained in the previous chapter. The reason for this is because the actual product, or the game, is most influenced by these two levels. The most interesting possible merger combinations also exist between these levels, as these manners of combinations can brew entirely new ideas and new possible games through the combination of different talents. There are also pre-existing examples of companies where the levels have been combined, or where they are co-operating for the purpose of an acquisition. (Williams, 2002; Langlotz et al., 2008)

The actual game production, which includes the ideas and programming, happens on the development stage. Development teams are mainly independent operations but have been increasingly often purchased by publishers and distributors, which seek to vertically integrate the development function in-house. Game production however is a creative process, especially among PC-games, where the policy of non-interference can bear the most fruits. The most successful game designers tend to produce better without interference from a larger corporate structure. More skilled publishers purchase the developers, but leave them largely untouched operationally (Williams, 2002)

Game development occurs in three ways in the industry. First party developers are in-house developers, who are internal to the publishing organization. In other words, the developers are a team that belongs originally to the organization of the publisher. Nintendo for example has their own publishing team. Nintendo is a good example of how the original team could not provide the entire

library for console games on their own. The next stage are the second party developers, who contract for a publisher to make games for their label. Williams (2002) calls this vertical integration by contract. Finally, third party developers are independent game developers that make games for a platform. As was mentioned, in case of console games, this involves acquiring an expensive development kit, paying licensing fees for the publisher, paying the manufacturer a price per copy of the game etc. It should be noted that currently the DLC, or downloadable content market is bypassing the traditional package market and according to Statista (2018), the value of the DLC market bypassed package market in 2017 but had been steadily gaining space from as early as 2011. (Williams, 2002)

The game industry is similar to the book publishing industry in a way that the main profit of the developers is generated from royalties paid to them by the publishers. The developer works on advances against future royalties, which are paid based upon pre-agreed milestones. Publishers then can share some of the risks associated with the publishing, by negotiating the contract in such a way that risks involved in for example lower sales are translated to lower royalties for the developer. For example, certain royalties could be paid only after certain milestones had been achieved in sales. Should the game be a success, the publisher likely acquires the intellectual property rights for the game tries to negotiate terms for possible sequels of spinoffs with as advantageous terms as possible. (Williams, 2002)

There are several risks involved with developing games, and several of the risks have also to do with publishers and manufacturers risks being “rolled down” to the developer. The costs involved in game creation are volatile. Earlier it was discussed that there are some easy to anticipate costs, such as the license for a development kit for the console that the game is being made, and of course labor. However, the problem is the unpredictability of the product itself. It is exceedingly difficult to assess the development time of a product, and these have varied greatly historically. Changes and advances in technology can make it very difficult to forecast what technologies are useful in the future and which ones pass quickly. Also, the lifecycle of a game is at least equally difficult to determine, as they are dependent on changing consumer tastes. Especially the last risk, has led to a hit game business product cycle, where publishers wish to acquire games which have the potential to become a hit and generate more stable revenue. (Williams, 2002)

First and foremost, the publishers are the rights holders for the games. They are responsible for marketing and manufacturing of the finished product. In the case of console games, the manufacturing process is a part of the licensing deal made with one of the console platform owners, and they maintain harsh control through limited duplication facilities. PC duplication is completely unconcentrated. As

with the platform owners, there are a clear business risks involved with publishing and several ways by which they have traditionally attempted to mitigate these risks.

Williams (2002) continues, that publishers may attempt to manage the risk by half-publishing jointly with another publisher. They take advantage of another publisher or distributor's sales or marketing expertise in their own publishing. A smaller publisher might contact another larger publisher. The smaller publisher would retain the rights to the game but would split the profits with the larger one. The larger provides the smaller with its better integrated distribution system and sales staff.

With strong marketing and distribution networks and above all else, a sellable product, the publishing business can be a very lucrative trade. As the discussion on the development level hints, the aspiration of publishers is to gain a game which is a hit title, and which can be spun off in to related hits and from which sequels can be made. For hit titles, the margin can be very high in any platform. This may be doubly true today, as with DLC (downloadable content) sales rising, distribution costs may have lowered to a significant degree. It should be noted, that when a publisher integrates a developer in to its organization, it has to bear the costs that have been mentioned earlier, concerning the development level. (Williams, 2002)

We will not discuss the distribution, retail or manufacturing level in detail in this thesis, as they are not directly relevant to the purpose of the paper. Briefly put, Williams (2002) provides the following explanation for the remaining levels. Distributors are responsible for the physical storage and delivery of the game product. Although games are being sold in physical copies still, the statistics on video game industry trends on Statista (2018) show a major increase in the value of the DLC -market, which could be seen as indicative of the continued lowering level of the sales of physical copies and an increase in digital ownership. This may indeed move the distribution level of the industry to the hands of the manufacturer. Although the PC's can have a many different digital marketplaces and storages for the games, such as Steam and Blizzards battle.net to name a few, with consoles the situation is different. This is because each console has its own game store, and therefore the distribution of the games to the consumers has moved away from traditional distributors and retail stores.

Mobile gaming has transformed the market for gaming a great deal. Its growth has exceeded all expectations. If placed in to the framework of the structure of the industry, it is situated somewhere in the same segment as PC-games, but it is also entirely different of course. As was stated before, it currently holds the largest share of the market, overtaking console games and PC-games. (Statista.com, 2018) This means that mobile gaming is likely turning out to be a literal cash cow for publishers and investors. For example, Tencent invested heavily in game companies and made the

most revenue in the world from games with a revenue of 7,4 billion U.S dollars during the first half of 2017. Among the key investments that they made were Riot, Activision and Blizzard, which are all large, old and successful development companies in their own right. (Statista.com, 2018) Interestingly however, the same Tencent invested in the Finnish mobile game company Supercell. Supercell generated 44,9 million U.S dollars in January 2018, thereby taking second place among top mobile gaming app publishers with the most revenue. (Paananen, 2018; Statista, 2018)

2.4. Summary

In the earlier chapters we discussed the history and structure of the video game industry, and from that discussion it can be deduced that it has been a transforming and steadily growing for as long as it has existed. Acquisitions have been a big part of the way business has been conducted, and it seems to have to do with the structure and the interconnections between the different companies. By this we mean that the previous chapters seem to indicate that the video game industry seems to potentially be an industry where acquisitions could have at least the theoretical chances of being successful. This means that acquisitions seem to present definitive benefits to the different firms in the industry. It is a fact however, that the measures that have been introduced earlier have the same limitations as they have in any other industry and they require the same level of judgement in order to assess the actual results.

The types of acquisitions have been introduced in the earlier chapters. In the case of the video game industry, the acquisition types that apply are the horizontal merger and the vertical merger. In a horizontal merger, a development studio is combined with another development studio, or a publishing company combines with another. Theoretically this could also involve the combination of two console manufacturers, but this is unlikely. As we have discussed before, currently there are three major console manufacturers in the industry and each one is competing for the level of network adoption by the users. They have few incentives to work together, and a merger between equals also seems unlikely in this case. We also mentioned that there are also the game retail and manufacturing levels in the industry, but they will not be discussed as the purpose of this thesis is to focus on the game development and publishing sector.

Vertical integration in the video game industry would involve combinations between developer, publisher, platform owner, manufacturer or retail. Each has its benefits, and we have noticed that from the point of view of the developer, it is in fact a desirable outcome to be bought. The same goes for being bought by one of the console platform owners, as the developer then has a more stable

access to a wide range of consumers. Essentially both of these combinations end up with the developer transitioning from a third-party developer to a second party developer.

From the point of view of the publisher or a platform owner, it is intrinsically in their interest to acquire game developers for themselves that are likely to generate stable cash flows. This is because the price of developing video games has steadily increased over the past years to a point where starting a new games franchise is always a major risk for the publisher or platform owner. From combining the information on the structure of the industry, the theory on acquisitions and the likely position of the publisher or the platform owner in the industry, it is in their interest to screen potential game development studios by first employing them as third-party developers and if the completed game is a success, then acquire the company and the rights to the game.

As was discussed before, synergies are the reason why companies engage in mergers and acquisitions. Synergies in the video game industry seem relatively straightforward and on a general level they do not appear to be too disruptive to the industry as a whole. When a developer for example is acquired by a publisher or a platform owner, the benefits to both parties are relatively clear. They both have competences which the other does not have, and which are necessary for the other party, but which they cannot due to the nature of their own business develop on their own. Technically developing these competencies for themselves is possible, but expertise required in running their own respective companies are both highly specialized, and therefore it is simply more efficient to look for a partnership in the form of an acquisition. To put it in more detail, the development company has the technical competencies required to actually develop the games, and the publishers have the business knowhow. What is interesting to note here is the fact that the relationship almost seems symbiotic rather than synergistic.

Although the level of co-operation and interdependence seems to be very high in the relationship, this does not mean that there are no synergies to be had between the two companies. For example, the reason for the combination might not be the desire to acquire a game franchise. It is plausible, that the publisher might want to obtain a technology or specific knowhow in a genre and then use either of these in combination with assets that they already own. A publisher likely has other development companies that they have partnered with, and the combinations between these companies could possible contain real synergies that concern either talent or technology or both.

A good case example of these synergies can be found in companies owned by ZeniMax Media-Corporation. According to their website, a diverse number of development studios are a part of their company. These include Bethesda game studios, id Software, Arkane Studios, Machine Games,

Tango Gameworks, Escalation studios and Zenimax Online studios. As was mentioned earlier, the game franchises that these studios develop are highly diverse. Among them are the Fallout and The Elder Scrolls franchise, which are both single-player role-playing games with vast open worlds, Doom and Wolfenstein, which are both mainly single-player fps-shooters, Dishonored, which is an action/sneaking first person game and The Evil Within, a survival-horror game. Zenimax Online studios has developed The Elder Scrolls Online: Tamriel Unlimited, which is an mmorpg or a massively online multiplayer role-playing game. Finally, according to the description on the website of ZeniMax, it is stated that Escalation studios is a supporting game development studio, meaning that they help the other studios in developing their games. (Zenimax, 2018)

This case illustrates how a publisher in the video game industry can attempt to optimize the portfolio of developers that they have acquired to create more diversity and therefore acquire a greater portion of the market for themselves. The cases concerning the logic behind an acquisition will be discussed in more detail in the empirical section, but the diversification is not necessarily the only strategy available for the acquirer in this case. As was earlier discussed, the firms in the portfolio can also complement each other.

3. Theoretical background – Acquisition motivations and post-acquisition integration methods and success

The purpose of this chapter is to provide an overview on the theoretical principles of mergers and acquisitions and how they succeed. Mergers and acquisitions are incredibly complex for a variety of reasons and it is therefore difficult to design a robust, but also delimited theoretical framework for a study that deals with their success.

Galpin (2014) states that an acquisition deal can be rejected and fail at any part of the process, this is due to the fact that either side can choose to back out at any point before the actual deal is closed. This means that every part of the deal has an effect on whether the deal will be success or not. There is however some merit in the thought that after the deal is closed, the actual compatibility of the two firms is tested. Before that event, the possible benefits of the deal exist in the minds of the managers making the deal, but after it the work to gain those benefits need to be done.

This is why we will limit the study to not include the acquisition event, including due diligence, bidding, negotiations, valuation, obtaining approval of shareholders and other issues involved in the planning and execution process of the deal. We will on the other hand focus on the motivations and the theories behind what the buyer wants to gain from the target in a deal. We will then move on to the post-acquisition phase and focus on the integration of the two firms. The way the integration is executed should reflect both the managerial vision behind the merger and also how it is seen to provide the most benefits.

3.1.1. Strategic motivations for acquisitions

According to Brealey et al. (2014) Mergers and acquisitions can be categorized by the relationship between the acquirer and the acquired. Horizontal mergers are mergers between two companies in the same level of the value chain. These are usually direct competitors. Vertical mergers on the other hand, involve companies on different levels of production. In this situation, the buyer expands backwards to the production of the raw materials or forward, towards the end consumer. In the gaming industry, an example of a vertical merger could be one where a company that owns the platform, such as a video game console, would by a developer studio to provide content exclusively to their platform.

Finally, in a conglomerate merger, companies that are in unrelated businesses are merged. The result is a highly diversified company that functions in several industries. The given justification for these

mergers were the diversification benefits that they would offer to the investors. However, much of the merger and acquisition activity in the 1980s and 1990s were due to breaking up the conglomerate companies, their inefficiencies made them prey to other seeking growth through acquisitions.

In his article, Trautwein (1990) studied the motives that managers have to engage in M&A activity. He analyzed the explanations put forwards for mergers and examined the evidence on theories that had been formulated on the subject. The field had provided a total of seven theories that attempt to explain the motives for acquisitions.

In the Efficiency theory, mergers are viewed as planned and that they are executed to achieve synergies. Synergy in vocabulary and in business is defined as the gains that two combined entities gain, in which they exceed the sum of their parts, for example that the two firms possess complementary competencies in the form of assets, such as production lines, employees, technology among others (Phillips, 2008). Trautwein (1990) continues that synergies can be further grouped by their effect. Financial synergies lead to lowered costs of capital. One way to theoretically do this is by lowering the systematic risk of the company, by investing in an unrelated business. Another way is to increase the size of the company, which may provide access to cheaper capital. A third method would be to form an internal market for capital, which could operate on superior information and allocate capital more efficiently. Trautwein (1990) continues that the idea of financial synergies has received a great deal of criticism, the main argument being that financial synergies of any kind could not be achieved in an efficient capital market.

Operational synergies are a consequence of combining operations of separate units, and knowledge transfers. They can both result in lower costs for the involved business units or may enable the company to offer unique products and services. Last, managerial synergies are realized when the acquiring managers possess superior planning and monitoring abilities that will benefit the targets performance. (Trautwein, 1990)

Both Trautwein (1990) and Gort (1969) describe the monopoly theory of mergers as one where the acquirer seeks to gain market power. This means that for horizontal mergers, the acquirer seeks to buy out its competitors, or engage in a friendly merger through which the combined entity would have greater sway over the market. A monopoly has greater control in determining the price or the amount of production that it can set in the market and can therefore optimize its profits more efficiently (Sweezy, 1937).

Trautwein (1990) continues that horizontal mergers are not the only that can be motivated by the explanations of the monopoly theory. Conglomerate mergers can also provide benefits to the firm

from this perspective. Profits from one market can be used to sustain operations in another one where the company is struggling at, the firm can limit competition in more than one market simultaneously and the firm can also aim to deter potential entrants from its markets. The synergies that are gained from acquisitions of this type are called collusive synergies, and they have the exact same effect as regular synergies. It should be noted however, that their economic effects are vitally different. The benefits are not based on efficiency gains, but from a transfer of wealth from the firm's customers to their owners. (Chatterjee, 1986)

The Valuation theory posits that the managers of the acquiring firm have a better understanding of the value of the firm being acquired, than the stock market does. The bidders have either unique information on about the possible advantages that can be gained from combining the firms. They may also have detected an undervalued company that waits to be sold in pieces. (Trautwein, 1990)

Trautwein (1990) continues with following theories: in the empire building theory, acquisitions are planned and executed by managers who seek to increase their own status and power through these acquisitions. The process theory posits that the acquisition is not an entirely rational decision by managers, but in fact the outcome of a process that is not entirely under the control of the managers. The raider theory assumes that the motivation of the merger is to gain the wealth of the acquired company's shareholders, and finally the disturbance theory attempts to explain the macroeconomic levels of M&A phenomena.

In this thesis our focus will be primarily on the perspective of the efficiency theory and the monopoly theory. This is because it assumes the existence of both operational and financial synergies and assumes that managers make decisions rationally. It is worth noting that some of the theories presented here do not assume that managers behave rationally in the interests of the shareholders of the company. For example, the process theory assumes that managers act in a state of limited rationality, and that they may not be fully aware or able to affect the processes involved in decision making. These facets of managerial M&A motivation will not be explored further in this thesis, as the purpose of this study is to explore the ways by which companies can improve their post-merger performance. The assumption is that the companies wish to attain synergies in mergers and acquisitions by which to improve their performance, and that they are at the very least acting in a state where they believe that their decisions are rational and that their motivation is the improvement of the company.

3.2. The human factor of post-acquisition performance

A company that seeks to strengthen its position in the marketplace with takeovers can be motivated by the notion that takeovers are a quick way of gaining new assets and technologies. (Schuler & Jackson, 2001). When acquiring a video game developer, a company receives at least two assets. One is the possible game franchise or franchises that the company being acquired owns. A successful video game franchise can be the main motivation to engage in a takeover in the video game industry. Game franchises are the main source of revenue for companies and taking over a smaller company with a successful franchise can be a source of growth for larger companies. In lieu with the efficiency theory of mergers (Trautwein, 1990), the acquirer might believe they can gain operational synergies with the acquisition. They might hope to gain a new and successful franchise and combine the creative capabilities of the acquired firm with their own technological and business capabilities. This might include new platforms for games, better graphic technologies, marketing and distribution channels.

Another asset that the acquiring company will certainly seek to acquire for themselves, are the employees of the acquired company. Tschang (2007) studied the delicate balance of creativity and rationality in the video game industry. He describes the video game industry being similar to other creative industries in many ways. Making games require the employees, or developers, to perform a significant amount of creative thinking and problem solving, and they also need to satisfy the evolving expectations of the consumers.

The major difference to other creative industries, is the amount of technical and business expertise required in game development. Making a game requires advanced programming skills, design, project management and a great deal of testing. Game development is complex and requires rational structuring to ensure the games development. (Tschang, 2007). Due to the complexity and multi-faceted nature of game design and development, it can be suggested that the developers of the company being acquired are in the center of retaining the success of the games that are being developed and that subsequently the success of the merger.

Takeovers are a time of change and upheaval for the company, but this is no less true for the single employee. Withenshaw (2003) notes that when situations are not well defined or seem chaotic, human beings tend to respond by turning inward and becoming more focused on their own needs and fears. When handled poorly, organizational change can have profound and negative effects. Schuler and Jackson (2001) cite mismanaged people issues as a major reason for corporate takeover failure. In his study, Krug (2003) also verified that after an acquisition, executive employees are more likely to

leave the company. His study focuses on executives, but the conclusion can be drawn, that employees that are likely to have other career prospects are likely to exit to a more promising and stable environment in a time of uncertainty. In their study of successful acquisitions, Green et al. (2007) that in a certain case acquisition of a software company, more than four fifths of the acquired company's employees were expected to be important to sustained deal value. Due to the nature of the video game development industry, a strong parallel can be drawn here through which we can posit that it is vital for the acquirer to take this issue in to heart when integrating the two companies.

Should the key-employees choose to leave the merged company, there exists a risk that the synergies and benefits that had been sought with the takeover will fall to nothing. Often the real expertise and knowhow on truly innovative products, services or processes are in the heads of the employees and will be lost to the company should the employee decide to leave. Unlike assembly lines or technologies, employees are portable and can walk out and never return, and they are likely to do so if they have already sent their resumes. A talent lost cannot be called back, and if enough talent leaves, then the titanic amounts of time and money spent on the acquisition will be useless, and the takeover cannot be considered anything but a failure. (Krug, 2003; Green et al., 2007; Galpin & Whittington, 2010)

The specific expertise that makes the game good may very well disappear, leading to a bland and uninspired sequel. Due to the nature of the industry, the issue can be even more critical for the success of the takeover than in other industries. It is therefore vital to explore what developers appreciate about their jobs, what they value and what issues cause anxiety, especially in a takeover situation. In this sense, it is not enough to merely keep the talent from leaving the acquired company. This prevention could be done by several ways. For example, the company employees could be promised a monetary bonus after the successful completion of the merger. However, if the issue is not handled properly, this will only delay the inevitable. To prevent this, it is vital for the acquirer to truly make an effort to regain the commitment of key individuals to their work and to the success of the new organization. (Galpin;Whittington;& Maellaro, 2012)

3.2.1. Behavior of the employee

To understand how employees might react to uncertain times and changes in their working environment, we will make a brief foray in to behavioral psychology and find ways to describe the actual process that a takeover or a merger can create in the employees of the organization.

According to psychoanalytic theory, our identities stem from the people, places and things that we feel are important to us and our lives. It follows, that the interactions and relationships we form with those people and places are an important part of our personal growth and development. When change occurs, and these ties are broken, the result is a sense of helplessness loss of control and lowered self-image. (Levinson, 1976)

When individuals apply for jobs, the interview that follows is two-sided. The individual is being interviewed whether they are a good fit for the position and organization that they are applying to, but the organization that is hiring is also being interviewed by the applicant. (Levinson, 1976). They will only accept the job if the culture is a good fit to their own psychological needs.

With enough time, the employee will form expectations of the employer and their future in the company in question, and subsequently so will the employer begin to form these expectations. These expectations are called psychological contracts and their components are shared expectations that the two parties form. They govern the interaction between both parties as surely as any legal document and affect both productivity and job satisfaction. (Baker, 1985).

Appelbaum et al. (2000) believe that this psychoanalytical view can be applied to what employees feel when the organization that employs them undergoes a major change and decide to merge with another. It is imperative that action be taken to prevent employees from feeling the sense of helplessness and loss of control that such an event can foster. An employee that feels helpless is unproductive, and times of great change are exactly those when manager require their employees to be in top working condition.

Executives and managers must understand that in times of change, the employee is losing the old way of doing things and are being told to do things according to a new system, culture and possibly even managers. Management should understand that psychologically, change is loss (Levinson, 1976). This perspective is irrespective of whether the change is eventually a positive one, or a negative one. No matter what the manner of change that is being implemented, employers and managers need to be wary. Change will produce the same effects, feelings of depression and helplessness amongst employees. These feeling need to be tackled if the change is to be implemented successfully and the benefits are to be gained. (Appelbaum et al., 2000)

Appelbaum et al. (2000) continue that change is handled best in such a way that all the parties involved are aware of why the change is happening. They must be allowed to examine the information provided carefully and verify it for themselves that the change that is happening is necessary. It is an extremely effective way for the employee to cope with change. One must keep in mind that the video

game industry is currently a highly stressful and hectic environment. Introducing change of this magnitude can have a very fatal effect on productivity, which is counter-productive to the change that is being advocated. (Dyer-Witherford & de Peuter, 2006)

3.3. Innovation and firm profitability on the long-term

An interesting connection can be drawn to innovation studies in this context. As has been pointed out earlier, when an acquisition happens in the video game industry, the buyer effectively seeks to gain several assets of the bought company. These include franchises, developers and technologies. As the video game industry continues to grow, consumers also continue to have higher expectations of the games that are on the market. This on the other hand makes it imperative for companies on the market to continue to be able to answer this demand and provide new and more advanced experiences for the players. This requires investments in development and in new technologies.

Till et al. (2001) describe that firms can grow and develop either through acquisitions or innovations. Earlier research suggests that acquisitions have a negative relationship with R&D investments and company innovation. Should firms tend to favor acquisitions greatly, and invest a great deal of resources in them, it may have unintended consequences. For example, irrespective to how acquisitions are financed, the resources remaining for managerial allocation may become constrained and therefore causing managers to forego other investment opportunities. This is a dangerous paradox in the video game industry, as generally acquisitions are a way for many companies to increase their market share and gain new possibilities of growth, but on the other hand if the acquisitions themselves stunt innovation and development, then a badly handled acquisition can be an exceedingly bad proposition for the management. A parallel can be drawn here to the study of Birkinshaw (2000) that was discussed earlier. In the cases that they presented, the human factor of the integration process was emphasized on the expense of the task integration, by providing independence and concessions to the acquired firms employees, that were unbalanced from the perspective of task integration and efficiency gains. This led to the acquisitions not reaching their goals in term of synergy and in retrospective, a bad allocation of resources that could have been used to internally to drive innovation through investments in research and development.

3.4. Integration approaches

Ellis & Lamont (2004) test different integration approaches by combining the works of Haspeslagh & Jemison (1991), Nahavandi & Malekzadeh (1998) and Marks & Mirvis (1998) in order to form a framework of different ideal integration approaches. Haspeslagh & Jemison (1991) developed a capabilities-based contingency framework that identified three primary integration approaches, which were preservation, absorption and symbiotic. They combined this framework with the work of Nahavandi & Malekzadeh (1988) who employed a culturally based perspective to identify various modes of acculturation based on two primary dimensions from the acquiring firm's perspective, which were the degree of relatedness between the two firms and the degree of tolerance multiculturalism by the acquiring firm.

Marks & Mirvis (1998) discuss the ways by which firms combine their operations following an acquisition. By using the degree of post-combination change in the acquiring and acquired firm as the basis of their classification scheme, they identify and describe the attributes necessary in an organization to manage five major integration approaches, which are absorption as well as reverse merger/assimilation, preservation, best of both and transformation. All three works offer relatively similar integration approaches in terms of the extent to which and how firms are reconfigured after the acquisition. These approaches were then combined by Ellis & Lamont (2004) and formed in to a graphical depiction which will be presented later in this chapter.

They differentiated the integration approaches by two factors. These were the need for organizational autonomy and the need for strategic interdependence. The five approaches they included in their framework were Holding, Preservation, Symbiotic, Absorption and Transformation. They further emphasized the overlap between the three different works by specifying in their framework how the definitions between them are related. Ellis & Lamont (2004) continue that these parallels or characteristics associated with the different integration approaches represent a central phenomenon, which implies that there appears to be an ideal way to effectively manage each approach.

The Preservation approach which is characterized by limited strategic interdependence of the firms involved but a high need for operational autonomy in both firms, allows both firms to continue to operate independently after the acquisition. The approach involves very little change in either of the two firms, given that one of the primary drivers of achieving post-acquisition success is the ability to keep intact the strategic capabilities being obtained from the target firm. It follows that this approach demands an integration tasks that allow for continuing differences within the target firm, enabling

autonomy and decision-making authority to the target firm management and providing resources to improve the operations of the target firm as needed. (Ellis & Lamont, 2004)

The Absorption approach represents conditions in which the need for operational autonomy in both firms is low and the need for strategic interdependence is high. The primary goal for the acquiring firm in this approach is to fully consolidate the activities of both firms by assimilating the target firm to its operations and culture. It is important to proceed in a planned, consistent and fast paced manner to minimize the level of disruption and uncertainty surrounding the post-acquisition integration process, as the process involves a great degree of change in the target firm. The approach can pose significant challenges and therefore it requires careful preliminary planning for key integration issues, a transition structure to oversee the integration efforts, communication during the process and clear deadlines as well as pressure for change. These manners of acquisitions are likely motivated primarily by the need to lower costs or improve the firms market position. (Ellis & Lamont, 2004)

The Symbiotic approach is used in situations where there is a critical need for both operational autonomy and strategic interdependence. It involves a period of initial preservation and then gradual blending of best practices in both firms. The integration process in this case requires that both firms undergo a degree of change, in order to create a combined firm that reflects the core competencies and leading practices of both firms. It is also important to develop an atmosphere of cooperation between members of the two firms, as there is first a need to coexist and learn from each other before amalgamating both firms and making major strategic changes in the two firms. The approach therefore requires some operational responsibility by target firm managers, a transition management structure to coordinate integration activities and help identify best practices, and a slower pace to deal with the challenges created in finding a balance between the need for boundary protection and boundary permeability. (Ellis & Lamont, 2004)

Primary business motivations for this approach can be a need to increase the size of the firm, leverage complementary product offerings, expand geographic market coverage and achieve cost-based synergies. Actions to achieve these synergies include actions designed to remove boundaries between the two firms, such as the consolidation of manufacturing and distribution activities and eliminating duplicative costs in areas of the combined firm. (Ellis & Lamont, 2004)

Ellis & Lamont (2004) continue that, while the symbiotic approach necessitates some changes in both firms as best practices are adopted, on occasions the integration process involves significant and fundamental changes in the organizational culture and operating practices of both entities. When both

firms are essentially broken down and rebuilt in to a new whole in the integration, the mode is referred to as a Transformation approach. It can therefore be seen as a special case of the symbiotic approach.

Haspeslagh & Jemison (1991) describe that the approach requires the newly formed organization to reinvent itself by founding an entirely new organization. Instead of combining the best of both firms, it is necessary to build the organizational culture from ground up, by creating a new set of values and a way of operating. Ellis and Lamont (2004) write that in order to facilitate the development of new practices, routines, organizational culture and many other issues, the firm needs to manage the process in an inclusive and inventive manner. This makes it necessary to create a blueprint of the new organizations structure and culture among other things, clearly forming the strategic vision of the new company as well as how the decision-making process of the firm works, involving both firms in this process and establishing a temporary management structure to oversee and coordinate the integration efforts. (Ellis & Lamont, 2004)

The Holding approach involves a situation where the acquiring firm acts basically as a holding company without any intention of integrating the two firms. It is characterized by a lower need for organizational autonomy and strategic interdependence. The acquired firm is likely kept at an arm's length and/or disintegrated as a cultural entity. It is possible that on occasion this approach differs from the preservation approach in that the integration choice may not be necessarily driven by a need for operational autonomy or organizational separation, but from a lack of concern for integration the decision-making process. It can also be seen as a diversification strategy, where the company makes the decision regarding the distribution of new acquisitions solely on the basis of financial considerations. Top management delegates a large share of its product planning and administrative functions to the divisions and concerns itself largely with coordination, financial problems and with building up a balanced portfolio of products with the corporate structure. (Ellis & Lamont, 2004) (Ansoff, 1957)

According to Ellis & Lamont (2004) the holding approach is closely related to holding companies, but they do not go in to further detail as their study dealt with integration approaches. As there no integration per se is involved an acquisition where a holding company purchases a target, it provided no further value for their study. As a form of acquisition, it is however noteworthy and common. A holding company does not have any operations or activities, it only own assets. These assets can be stocks in other companies, limited liability companies, limited partnerships, private equity funds, publicly traded stocks, bonds, real estate, song rights, brand names, patents, trademarks, copyrights or anything else of value. If the assets that are being owned are mostly stocks in other companies, to the extent that the holding company owns a majority share in the company in question, these are by

definition stand-alone companies located in any possible country, staffed by local employees, with their own bank accounts, offices, manufacturing facilities and more. (Kennon, 2018)

The parent company can influence the subsidiaries in such a way that the CEO and his/her subordinates can determine the CEOs and key executives among the other companies the parent company controls. The function of the parent company in the whole is largely financial. They can lower their capital cost through the overall strength of the aggregate. They can for example issue bonds at highly reduced rates and then lend the money to their subsidiaries at rates that would not be possible for them to acquire if they were stand-alone companies. In this way, the interest expenses of the companies are reduced, and this in turn increases both return of equity and return on assets. (Kennon, 2018)

A clear connection can be drawn between the article of Ellis & Lamont (2004) and Zollo & Meier (2008) as the former studied the importance of fitting the integration approach the relationship and purpose of the acquisition and the latter proposed that there exist a logical connection between the different levels being analyzed in an acquisition. The levels discussed were the operational, transactional and firm level. In sum it can be described that the way the operational and process levels of the firms are integrated, and whether this is successful has a positive effect on the transactional level, which deals with the accounting results of the firm. The shift in this level has a clear effect of the firm level, which means the stock price and firm performance in the market.

3.5. Summary

To summarize, the different approaches to what happens in a company after the acquisition, and what theoretical aspects there are to look at how a company sees the acquisition process and value creation after the fact have been discussed. A comparison can be drawn between the theories of Trautwein (1990) and Haspeslagh and Jemison (1989) in considering the connection between motivations for acquisitions and the different approaches to integration. Although the two studies deal with two distinct subjects, the area of research is of course related. The different integration approaches are by definition systematic and process oriented, and therefore the efficiency theory and the market power theory are both good candidates.

If we further combine the studies of Ellis & Lamont and Zollo & Meier as we described earlier, the motivational aspects of the decision-makers can be drawn in together with different integration approaches, and that if the decision makers seek to make decision that maximize the efficiency of the

acquisitions, then it is in their interest to include the whole process, including integration in to their decision and expected results of the acquisition.

4. Methodology

Due to the complexity of the phenomenon and the fact that reliable consensus on an effective way to measure the post-acquisition success of an acquisition does not yet exist, a different approach will be applied in this thesis. Perspective will be acquired by examining acquisition cases that present unique motivational factors and business opportunities for the acquirer.

Case studies are suitable for studying complex social phenomena. Typically, case studies are characterized by having many variables of interest, multiple sources of evidence and theoretical propositions to guide the collection and analysis of data. A case study is in essence a descriptive study of something unique, special or interesting, they can deal with individual, organizations, processes, programs, neighborhoods, institutions and even events. It tells the story behind the result by capturing what happened to bring it about, and it can be useful in highlighting the success of a project or to bring attention to a particular challenge or difficulty in a project. A case can be selected because they are effective, ineffective, representative, typical or of some special interest. (Yin, 1994; Neale et al., 2006)

Yin (1994) lists five central components of a case study quote:

1. A study's questions, "why", "how"
2. The study's theoretical propositions, pointing attention, limiting scope, suggesting possible links between phenomena
3. Study's units of analysis, the main units need to be on the same level as the study questions and typically comparable to those previously studied
4. The logic linking the data to the propositions – matching pieces of information to rival patterns that can be derived from the propositions
5. Criteria for interpreting the findings – iteration between propositions and the data and matching sufficiently contrasting rival patterns to data. There is no precise way of setting the criteria.

Neale et al (2006) further continue that the main strength of a case study is that it can provide more detailed information than what is available through other methods, such as surveys and statistical methods. They also allow the presentation of data collected by multiple methods, such as surveys,

interviews document review and observation. They propose that there are limitations however, and these limitations have been presented below.

Case studies can be lengthy: They provide detailed information in a narrative form, and therefore it may be difficult to hold the interest of the reader for a long time. This should be taken in to account by providing rich information in an easily digestible manner. (Neale et al., 2006)

Concern that case studies lack rigor: Case studies have been seen as less rigorous than surveys and other methods in the evaluation and research fields. This is due to the fact that qualitative methods are seen generally as unscientific by some, and also in many cases the researchers themselves have not been systematic in their data collection and have allowed bias in their findings. (Neale et al., 2006)

Not generalizable: Case studies are difficult to generalize from one case to another. They may also on occasion be prone to overgeneralization, which is due to the researcher selecting a few samples and assuming without evidence that they are typical or representative of the population. In this sense they tread on the domain of statistical methods. Yin (1994) advises that case study researchers should generalize their findings to theories, in the same manner as a scientist generalizes from experimental results to theories. (Neale et al., 2006)

Although case studies cannot be used to generalize the result of an analysis the same way as statistical methods can, they can be very useful in providing a more in-depth analysis of a phenomenon that is less easily understood, which contains many variables, and where interconnectedness of different aspects of the phenomena are unclear. They can provide an answer to the why and how questions involved in the phenomena, which are beyond purely statistical methods and they can be used to test a theory. Due to the limitations of other methods available and the difficulty of analyzing post-acquisition performance, the fit between merging companies and the effectiveness of the integration process, it is the best method to provide detailed answers to the questions posed in this thesis.

4.1. Measuring acquisition success in the cases

The work of Zollo and Meier (2008) has been used as the foundation of the methodological logic of this thesis and the work of Thanos and Papadakis (2011) has further been reviewed in determining the appropriate way to use the measures chosen. Zollo and Meier (2008) presented a framework, where acquisition success can be divided to task, transaction and firm level success, which are linked by a causal, unidirectional, logical chain. In practice this means, success in each level is necessary, but not sufficient to condition to the following one. To repeat, task-level integration process

performance has a positive influence on the likelihood of creating value through the entire transaction and at the same time, value created through acquisition will have a positive influence on overall firm performance, as the realization of synergies in the form of cost and revenue improvements are clearly observable in the consolidated financial statements, which will be in turn reflected in the in stock price movements and subsequent returns. Below is the framework presented by Zollo and Meier (2008)

This can also be interpreted in the reverse direction. According to the same logic, in the event of an acquisition and especially after time has passed and the initial expectations of the market on the success of the acquisition have cooled, a long-term increase in performance on the firm level will have needed to be preceded by some manner of positive change in the transactional level of the company. In other words, increased revenue or cost efficiencies have led to increased profitability of the company and this in turn has led to a higher valuation of the company's stock in the market. If these transactional level improvements are a consequence of the acquisition, then they must have been due to improvements on the task level. The origin of task level improvements can vary greatly, as Zollo and Meier (2008) note, but for the procedures done to be successful, the potential benefits must already exist. Due to this logical link, we can deduce that improvements in the transaction level that are a consequence of acquisition success have to have been preceded by success on the task level.

For this reason, we are able to choose measures that use the transaction level or the firm level to evaluate the success of the acquisition. To measure the firm level, one would need to employ statistical methods and event studies in particular. Event studies are a powerful tool for testing the effects of particular market events on the price of a security, often common stock. (MacKinlay, 1997) Despite this, as we have brought up earlier, they suffer from limitations that calls to question their absolute usefulness in testing success in acquisitions.

Transaction level measures on the other hand are the accounting measures derived from the financial statements of companies. Accounting measures are more effective and efficient for the more in-depth analysis that will be conducted in this thesis, as we can counter some of the limitations imposed in using them in the long term. These limitations mainly involve the noise in the data that is unavoidable when there is a long period of time between the event that is being observed and the time when the measurements are taken. The noise is also present when simultaneous events cause movements in the underlying figures that the measures are based on. This generates serious limitations in using purely accounting based measures to determine the success of an acquisition. By building a narrative in the form of a case study, we can try to explain the situation leading to the acquisition, what occurred

during it and also what took place after the acquisition, thereby allowing some of the noise involved in using the measures to be explained and corrected.

4.2. Accounting based measures of acquisitions

Thanos and Papadakis (2011) found that accounting-based methods that have been employed by researchers can be distinguished in to three separate categories. These three categories are ratios, such as return on assets (ROA), return on sales (ROS), return on investment (ROI), return on equity (ROE) and return on capital employed (ROCE). The second category refers to growth measures, which are sales and profits, and assets. The third one refers to operating cash flows.

According to Thanos and Papadakis (2011) the most common accounting ratio used in measuring acquisition success was Return on Assets (ROA). It was used in almost half of the studies in their core list of papers. They believe that this is likely due to it being less influenced by potential biases that other types of ratios suffer from. Meeks and Meeks (1981) find that higher profit sales ratio have complications relating to the two companies consolidating their accounts. The value of the ratio is complicated by the treatment of the sales made by the merger participants to third parties, which are now diverted to the merger partner and also those which were made to the merger partner as an independent company but are now internalized. This will lead to the value of the ratio rising immediately after the merger or acquisition, if the participants were already trading prior to the deal, or if either participants sales are diverted from third parties to its merger partner. From this it follows that an increase in efficiency cannot be measured only by an increase in the profit-to-sales ratio.

Meeks and Meeks (1981) continue, that the problems involved in using return-on-equity have to do with the relationship between the measure and return on total net assets. Total profit $P = rA$ can be defined in terms of shareholders' income $e(1-g)A$ and loan interest igA . In this formula:

$$rA = e(1 - g)A + igA$$

Where the variables are,

r = return on total net assets

A = Total net assets

g = gearing

i = interest rate

e = return on equity

Solving for e ,

$$e = r + \frac{g}{1 - g}(r - i)$$

From here it can be observed that the return equal to the rate of return on net assets plus a multiple of the difference between the rate of return on net assets and the rate of interest on long-term loans. As can be seen, the ratio increases as gearing increases. For given values of r and i such that r exceeds i , e will be higher as g increases. The problem that arises in the case of a merger is that if the overall profitability of the merged company stays unchanged, return on assets exceed interest rate on long-term capital and the gearing of the merged company increasing, this will lead to an automatic increase in the return on equity of the merged company immediately after the acquisition.

Problems involved in return on assets involve the accounting conventions used in the year of the acquisition. If the participants in the acquisition were to continue to draw on independent accounts on the year of the acquisition and then pool them, the following expression would be obtained.

$$r *_{my} = \frac{P_{qy} + P_{vy}}{\frac{1}{2}(A_q(y-1) + A_v(y-1) + A_{qy} + A_{vy})}$$

Where the variables are:

P_{qy} = profit for the acquirer

P_{vy} = profit for the acquirer

y = year of the acquisition

A_q = Asset stock of the acquirer

A_v = Asset stock of the victim

The expression can be described as the 12-month profit flow for each participant divided by the average net asset stock for the two participants together. For the acquirer, the same terms are included in the actual profitability formula for the amalgamation, but as the victim was not a part of the amalgamation at the beginning of the year, their opening net assets do not appear on the denominator, all the while in the numerator the profits of the victim appear for whichever months it has belonged to the amalgamation. This can lead to an upward bias where the value of the denominator is lower as

a part of the assets are not included in it, while the numerator is higher, as the profits of the victim are included in it. The bias can be controlled for by another measure of ROA, in which the effect of the profits of the target are measured against the assets of the acquirer. This is measured by using the assets of the acquired company as the denominator and the combined profits of the two companies in the numerator. The profits of the target are adjusted for the time during which it has been a part of the combined company and it can range from 0 to 1. This is calculated by dividing the acquisition closing month by twelve. This measure is denoted with t (Meeks & Meeks, 1981)

$$r_{my} = \frac{p_{qy} + tP_{vy}}{\frac{1}{2}(A_{q(y-1)} + A_{qy} + A_{vy})}$$

Although there are limitations to each of the ratio measures that have been described, it is clear that the limitations imposed are least severe in the case of return on assets (Meeks & Meeks, 1981). At the very least, they appear to be most easily controlled by taking in to account the way that the ratio is calculated, while in the other ratios, it appears that the condition of the acquired firm plays a role in what values the ratio can get. According to Thanos and Papadakis (2011) return on assets is the most widely used accounting ratio in the M&A literature. As was defined in the above formula by Meeks and Meeks (1981), it is calculated by dividing income or net income by total assets. Scholars most of the time compare the before acquisition return on assets of the acquiring firm (or the weighted average of the acquirer and the acquired) with the return on assets of the acquiring firm (or the weighted return on assets of the acquirer and the acquired), for a period after the acquisition. The problem that was pointed out by Meeks and Meeks (1981) has been remedied by excluding the year the acquisition takes place from the calculation. In cases where the difference is positive, the acquisition is considered to be successful and when the opposite is true, the acquisition is considered to be a failure (Kusewitt, 1985). Return on assets has also received critique in the literature as the method disregards industry influences. (Harrison et al., 1991) This is often remedied by scholars by adjusting their measure of firm return on assets for industry effects by subtracting the average industry return on assets or the return on assets of firms.

Thanos and Papadakis (2011) continue that one quarter of the studies reviewed used growth measures as a proxy for evaluating M&A performance. They have evaluated the percentage rate of growth in several aspects, among them sales, profits and assets. The third largest separate measure used by scholars are operating cash flows. In these studies, scholars have estimated operating cash flows for either the acquiring firm, the target or both. This methodology refers to changes in asset productivity following a merger or an acquisition. Operating cash flows are defined as: Sales, minus cost of goods

sold and selling and administrative expenses, plus depreciation and goodwill expenses. The value is often normalized by the market value of assets.

In a separate study by Papadakis and Thanos (2010) compared the weighted return on assets of 50 targets and acquiring firms for two years after the acquisitions. Their results indicated that half of the firms experienced negative accounting returns two years after the acquisition. In the case of growth measures according to the review of Thanos and Papadakis (2011), a consistent result is that such measures indicate that M&As lead to negative outcomes for both the acquired and the acquirer. Interestingly, results of studies that employ operating cash flows as measures of accounting performance indicate that acquisitions have a positive effect on for acquiring firms.

It should be noted however, that there is a limitation involved in using accounting measures in determining acquisition success. This has to do with the acquired companies often not being public and therefore acquiring information about their financials can be challenging at best. There is also the issue that if the company in question has gone bankrupt after the observation period, then this will likely complicate the measurement of ratios that are more complicated. To mitigate the occurrence of this risk, fairly high-profile acquisitions have been chosen for the case analysis. We will also counter the problem with another measure, in this case we will use the year of the announcement of the acquisition as the benchmark year, and one year after the actual acquisition as the current period. This will create noise to the accounting data, but this will also be mitigated by the fact that each acquisition is a high-profile acquisition for both the acquirer and the acquired.

4.3. Measures for the analysis

Two accounting measures have been chosen for the case analysis that will be performed in the next chapter. The accounting measures were chosen on the basis of how well they reflect the creation of synergies in the acquisition. The first accounting measure used is Return on Assets (ROA). ROA essentially shows how well the company that it has been calculated from is able to use its existing assets to generate profits. Theoretically, an increase in the ratio shows that the company has been able to make its operations more efficient, by generating more profits with the same, or a lesser amount of assets, than in the past. A decrease on the other hand tells of an inefficient use of the company's assets, and in the event of an acquisition, could imply that the acquisition was an inefficient use of the company resources. Synergies refer to the ability of the two companies that are combining their operations, to function more efficiently than separately. A positive increase in the value of ROA could be a telling sign of existing potential synergies in the acquisition, as when the assets of the two

companies are combined and their profits are pooled, an increase would seem to mean that the two companies act more efficiently when combined than separate.

The second measure chosen for the thesis is a growth measure, namely revenue growth. Revenue growth is an excellent determinant of the general growth of the firm that is being observed. As revenue is comprised of only two variables, price of goods and the amount of goods sold, an increase in either simply indicates that the company has been able to either sell more or sell with a higher price. Both options simply mean that the company's customers are keener to buy their products for any given reason. An increase in the combined revenue of the two companies can be interpreted as the realization of synergies, as for any given reason the two companies have been able to grow more together than they could have done separately.

5. Results and analysis

In this section, three cases of acquisitions in the video game industry will be presented and analyzed according to the framework presented in the last chapter. These three cases have been selected due to the different business opportunities and the position which the acquiring firms seek to attain in the market. The focus will be on the strategic fit of the two firms, and the way that the acquisition has been handled and also what the tasks of the acquired firm are in the combined firm. Accounting measures will also be employed to gain a level of objectivity to the analysis.

5.1. Activision – Blizzard and King

The acquisition of King by Activision-Blizzard was chosen as a case for this thesis for a relatively simple purpose. It is a good example of a video game publisher, that is expanding to a market new to their established portfolio. Due to the growth of the mobile games sector (Statista.com, 2018), it is not surprising that established companies in the video games sector would seek to gain growth by claiming a presence in the nascent market.

Activision-Blizzard were separate publishers which announced their own merger in 2007 (Alexander, 2008), and were officially merged in 2008. After the merger, both Activision and Blizzard maintained separate corporate identities, with independent development and publishing streams. They are headquartered in Santa Monica, California. (Ray, 2014)

Activision was founded in 1979 by David Crane, Alan Miller and Jim Levy. They were originally employed by Atari and they split from the company for reasons relating to the reward system in place. Fahs (2010) wrote, that at the time the industry was not a business controlled by the creative talent responsible for the highly profitable software. As the games were less heavy on the performance side, the designers were the ones that created the games from scratch. Despite this, they were not given a percentage of sales like recording artists or the author of a book, instead being locked in to a meager salary of around 30 000 \$ for their work. At this time four people, David Crane, Bob Whithead, Alan Miller and Larry Kaplan were responsible around 60% of the game sales of the entire company.

They attempted to appeal to the president of Atari for better benefits but were shot down. Their response was to create their own company, where designers would be an essential part of brand identity, with the lead developer of a given title receiving credit on the game box. Soon after the formation of the company, they were joined by the two developers mentioned earlier, Larry Kaplan and Bob Whitehead. They were soon met with legal action by Atari, which attempted to maintain its

monopoly on the video game industry. The suit was settled on 1982, but by this time Activision had already established itself as a competitor in the expanding industry. Activision was also the first third party developer for a console (in this case Atari) and was soon followed by many imitator and competitors. (Fahs, 2011; Ray, 2014)

A corporate reorganization caused the departure of the founders and much of its creative talent in 1988. Executives attempted to rebrand Activision to a multipurpose software developer and renamed in Mediagenic. The company struggled to stay afloat, but a change of management and ownership in 1990 signaled a dramatic turnaround. It renamed itself Activision and spent the next several years building on the successes of its past. Activision acquired a new generation of talented designers and they also forged lucrative partnerships with independent developers. They continued to post profits through the late 1990s and 2000s even with the development costs of new games soared and a typical game costing millions of dollars to bring to the market. In 1995 they released Mech Warrior and they also partnered with Id Software for their game Quake 2. This arrangement lasted until relatively recently. In 2003 they launched the Call of Duty franchise, and the game challenged Electronic arts supremacy in the first-person-shooter market. In 2005 the developers of RedOctane and Harmonix Music Systems for the sequels of Guitar hero. Although future development of the titles were halted in 2011, other assets of Activision retained their potency, with Call of Duty ranking consistently as one of the most lucrative franchises in electronic gaming. (Ray, 2014)

Ray (2014) continues that Blizzard Entertainment was founded in 1991 as Silicon & Synapses by Allen Adham, Micahel Morhaime and Frank Pearce, three UCLA graduates interested in electronic gaming. Originally their early projects were conversions of existing titles for various home entertainment systems, but soon they released a number of original titles, among them Lost Vikings (1992), Rock 'N' Roll Racing (1993). They changed their name to Blizzard in 1994 shortly before releasing the first game of their most successful franchise: Warcraft: Orcs and Humans, a real-time strategy game, that became one of the most definitive games in the entire genre. They followed with the sequel Warcraft 2: Tides of Darkness, which was graphically richer and offered a number of user-interface and multiplayer improvements.

Multiplayer-games would eventually turn in to Blizzard most lucrative investments. They launched the action-roleplaying game Diablo in 1996 and with it the platform Battle.net, which was a free service which allowed players to host and join multiplayer games and chat online. Battle.net was further expanded with the release of Starcraft in 1998, which was an RTS game loosely based on the Warcraft user interface model. Starcraft had a very well-made single-player game campaign, although its true strength was in its multiplayer mode. Starcraft is a popular esports all over the world, but

arguably its home is in South-Korea, where it is not far-fetched to call it a national pastime. (Ray, 2014)

Diablo II improved on the multiplayer elements that catapulted its prequel to success. This was followed by Warcraft III: Reign of Chaos, which incorporated limited role-playing elements into the well-established RTS-template and allowed end-users to create new game maps, import sound effects and radically alter the gameplay experience. The final entry in the Warcraft series was a dramatic deviation from its RTS roots, when World of Warcraft was released. It was a massively multiplayer online roleplaying game, or MMORPG, which debuted in 2004 and drew millions of players to the world of Azeroth. World of Warcraft still remains one of the most played mmorpg games at present and in 2010 the game boasted more than 12 million monthly subscribers. (Ray, 2014)

The merger of the two companies was announced on July the 10th 2008 when Vivendi, then majority stockholder of Blizzard, collaborated with Activision to form Activision blizzard. Technically the merger of Activision-Blizzard was formed by combining Activision and Vivendi Games, which is Vivendi's interactive entertainment business unit, which included Blizzard Entertainment. Their aim was to form "the world's most profitable pure-play online and console game publisher. The merger was structured so that under the term of the agreement Vivendi games merged with a wholly owned subsidiary of Activision and Vivendi games shares were converted into approximately 295,3 million new shares of Activision common stock. Simultaneously with the merger, Vivendi purchased 62,9 million new shares of Activision, issued at the time of the merger. This led to Vivendi gaining an ownership stake of 52% in Activision-Blizzard. (Activision.com, 2008) However, six years after the original merger, an investment group led by Bobby Kotick, Ceo of Activision, and Brian Kelly, Co-Chairman of Activision, purchased Vivendi's stake in Activision-Blizzard for \$8.2Billion. In 2014 and 2016 Vivendi would part with their remaining 12% in the company for \$1,95Billion. (Gamesindustrybiz.com, 2017)

At present Activision-Blizzard remain one of the most successful combination publisher-developer and they own some of the most popular franchises in the industry. They have a firm presence in the multiplayer game segment through the franchises brought in by Blizzard, and games such as Starcraft II have spun around to have a presence in the growing eSports industry. World of Warcraft was launched in 2004, and even now after almost 15 years, it still continues to have sequels produced to it, although it has slowed down its advance in recent years. Activision on the other hand, has a firm hold on the first-person shooter genre even today, with the release of Call of Duty IV. It is also a game played extensively online and has a firm presence on both console platform and PC's. The

original purpose stated by the leadership of the company indicated that their strategy is to grow to be potentially the most influential player in the industry. (Activision.com, 2008)

Judging from the announcement on Activision-Blizzards webpage (2008) Activision, was motivated in this acquisition the aim to gain a higher market position. Quote "By combining leaders in mass-market entertainment and subscription-based online games, Activision Blizzard has leading market positions across all categories of the rapidly growing interactive entertainment software industry. With more than 10.7 million subscribers on World of Warcraft, and with tens of millions of people playing Guitar Hero, Activision Blizzard's games are transcending the traditional stereotypes and are more popular as a form of entertainment than ever before. We look forward to building upon our brands to create value for our shareholders, customers and consumers." As can be seen, as a publisher, their outspoken motivation for the acquisition was market growth, not efficiencies created by the unique combination between the companies. As Blizzard Entertainment was owned by Vivendi Games before the acquisition, one cannot infer that the arrangement between a publisher and developer would offer anything new in that respect to the two firms. It can be speculated that there were technical and skill related synergies to be found between the two firms, as they released announced the game Overwatch in 2014 and released it in May 24th 2016, which was aimed at consoles, whereas traditionally Blizzard published their games for the PC (Saavedra, 2016). It was Blizzards first first-person-shooter (FPS) game, and it was designed as a fully online game. Here we can draw connections to both experience by Activision in successful FPS-games and also to the expertise of Blizzard in multiplayer games.

According to the two exhibits presented earlier, it would seem that at that time, the motivation of the companies to engage in acquisitions and merger are compatible with both the efficiency theory of mergers and the monopoly theory of mergers. The motivation named by the two companies clearly states a desire to attain market power and horizontally integrate two companies. The line between a horizontal and vertical merger is fairly dim in this case, as Activision acts as both a publisher and a developer with games of their own. It should be noted however, that the two companies did cater to a technically different customer base, as Activision specialized in FPS-games and Blizzard to role-playing games and strategy games. The efficiency theory of merger does seem to have some room in their motivation as the development of Overwatch does show a combination of the two, but it could be said with some confidence, that the leadership of the company may have seen the increase of their customer-base as the primary motivation to engage in a merger.

In the case of the now combined Activision-Blizzards purchase of King Digital Entertainment, it seems that this trend continues. In an announcement on their webpage, Activision-Blizzard states that

“Combined Company to be crowned a leader in interactive entertainment” and claim to become a new global leader in mobile gaming, which is indeed the largest and fastest growing segment in the interactive entertainment, as confirmed by Statista (2018).

King Digital Entertainment is a developer and publisher of casual games for digital platforms. They specialize in highly engaging, differentiated gaming experience where the combination of challenge and progress drives a sense of achievement, in other words their games have the aspects that are valuable in and special to mobile games: easy to get into and highly addictive. Their products include Candy crush Saga, Pet rescue Saga, Farm Heroes Saga and many others. There are very few similarities to their products and customer-base when compared to what are attributed to Activision-Blizzard, as we analyzed earlier, so we can draw a conclusion with a relatively high confidence, that the motivations described in the monopoly theory by Trautwein (1990) are best applicable in this case. Synergies applied to the efficiency theory may exist, but such synergies may be difficult to perceive during the one-year period after which the measures are taken.

Among the integration methods laid out by Ellis and Lamont (2004), the acquisition in question is closest to the preservation approach. There appears to be at least a limited need for strategic interdependence, as the firms do not seem to provide each other capabilities that would directly complement each other. An increase in market share and the ability to reach new customer segments is indeed valuable, and much can very likely be built on the fact, but it is still not the same as interdependence. The firms do not necessarily need to combine their operations and seek efficiencies from a tight co-operation to gain synergies from the acquisition, in the same way as for example when two firms with clearly complementary technologies merge. The merger of Activision and Blizzard themselves seem to have had more strategic interdependencies than their acquisition of King did.

On the other hand, one could argue that there is a need for operational autonomy in the relationship of the two firms. Activision-Blizzard does not have expertise in mobile games themselves, and therefore if they were to directly meddle in the way that King is operated, they might initially do more harm than good. It can also be argued that as King was acquired by Activision Blizzard, a firm that has no experience in mobile gaming, they did not acquire King in order to improve on their (Kings) operations, but to take advantage of theirs. It follows logically that in order for Activision-Blizzard to gain the benefits that they desire in the acquisition, they should afford King autonomy to act on their business in a way, that is seen as the value-creating part of the acquisition.

This seemed to hold true in the sense that after the acquisition, King’s executive group, CEO Ricardo Zacconi, chief creative officer Sebastian Knutsson and chief-operating officer Stephane Kruger all

stayed and ran the business as an independent division within Activision-Blizzard. After the acquisition, in the fourth quarter, Activision-Blizzards stock rose after reporting a record revenue. (Sinclair, 2016) (Wadhwa, 2017)

The date of the acquisition for Activision-Blizzard and King was on the 23rd of February 2016 and the announcement date was on November 2015. (prnewswire.com, 2016) Therefore, the logical choice for the year prior to the acquisition is the announcement year of 2015, and for the post-acquisition year the year 2016 will be chosen. The data for Activision-Blizzard for the measurement of ROA was acquired directly from their financial statements for the years 2014, 2015 and 2016. The amounts are presented in millions. The reason for including the financial statement from 2014, is that the average of the previous and current year of total assets will be used as the denominator for each year. For 2015 Blizzards total assets equaled 15,251\$ and in 2014 the same number is 14,642\$. Net income was 0,892\$. Therefore, the return on assets for Activision Blizzard in 2015 is 0,0597 or 5,97%

$$\frac{0,892}{(15,251 + 14,642)/2} = 0,0597$$

For 2016 the calculation must take in to account the total assets of both King Digital Entertainment and Blizzard-Activision. There is a difference in the total assets reported by Activision-Blizzard for the fiscal year 2015 in their financial statements for 2016 and 2015. In 2016 they reported that their total assets amounted to 15,246. The difference is miniscule in a firm of the scale of Blizzard-Activision and using this value for determining the total assets of 2016 will not create a bias in the comparability of the ratios. It should also be noted that it has been stated in Activision-Blizzards financial statement for the fiscal year 2016, that Kings financials are included in their consolidated financial statement, as the acquisition was completed in February 23rd of 2016.

In 2015, King digital entertainment reported total assets worth of 1,534\$ (in millions). (prnewswire.com, 2016) Activision-Blizzard reported total assets worth 17,452\$ for the fiscal year 2016 and the consolidated net income was 0,966\$, as was stated before, this figure includes the net income generated by King, as the consolidated financial statement includes the King Digital Entertainments figures. From these figures we can calculate ROA for the value of 0,564 or 5,64%

$$\frac{0,966}{((1,534 + 15,246) + 17,452)/2} = 0,564$$

There is a very slight drop in the value of ROA between the two periods. It can be attributed to a rise in the total assets for the fiscal year of 2016 and an increase in the net income, that is not large enough

to compensate for the increase in the total size of the company. Therefore, it can be said that at least for the first year, the company did not manage to acquire large synergies. However, approaching this issue so bluntly has its drawbacks. The limitations that have been noted earlier with regards to accounting measure need to be considered before a judgement like this can be made. As most of the acquisitions have been considered failures by the metrics used in accounting, a relatively unchanged ROA may be a sign, that despite the changes that have been needed to be made after the acquisition, the combined company has managed to at least maintain a status quo with regards to their profitability.

The second measure that we chose was a change in revenue for the acquirer. This metric can be used to measure if the scale of the business has increased, or if growth has been acquired. For 2015, Activision-Blizzard reported a net revenue of 4,664\$ and for the subsequent year the figure is 6,608\$. King reported a revenue of 1,999\$ for the fiscal year of 2015. If the measures are combined, then we notice that the net revenue of both companies when combined have been reduced by 0,055\$. This would seem to imply that the growth of the two companies' combined has not been as large as it could have been when they were separate. It is however important to keep in mind the scale of the revenue that companies like Activision-Blizzard. In this case one should also consider the limitations imposed by accounting measures, and the fact that a single year may be too short a time to consider whether the acquisition can create synergies or not.

The motivation and the method of integration should also be taken in to account in order to understand whether the acquisition was successful or not. For Activision-Blizzard, their motivation for engaging in acquisitions and this acquisition in particular was to increase their market share. For King, Lunden (2016) points out that although King may have had been at a stage where their business had matured and were at the end of their boom. She continues that as a casual game company, the health of their business is only as strong as their hit brand, and it is possible that they may have hit a wall in this respect. Partnering up with Activision-Blizzard, who have had an excellent track record of keeping their game franchise brands healthy may have been a necessary long-term survival strategy for them. The integration process does seem to match the way that it should be done successfully in theory, as King has retained their autonomy as an independent subsidiary of Activision-Blizzard, with the key management still in place even today.

When all these factors have been taken into consideration, it is not completely straightforward to make the judgement on whether the acquisition has failed or not. This thesis has been written from the point of view of the acquirer and therefore their motivations for the acquisition should be considered. As their motivation was an increase in the market share and the expansion of the

franchises that they own, and not immediate synergies, it can be said that a slight decrease in the measures does not yet constitute a failed acquisition. It also follows that as the decrease was not material, one can say that a market diversification strategy and the integration process chosen played a part in the acquisition success.

5.2. Microsoft Mojang acquisition

The next case that we will go over is different from the earlier acquisition with regards to the motivation and the relationship between the two firms. The acquisition of Mojang by Microsoft was chosen for several reasons. Microsoft is a massive information technology conglomerate that is best known for their operating systems. As the scale and scope of the company's operations are incredibly wide, their entire business will not be handled in this thesis, instead the focus will be on their video game related operations. We will build a picture on how and why Microsoft decided to enter the video game industry and also what their strategy and goals are in this segment of their business. Microsoft is major player in the video game industry due to the fact they are one of the three platform owners. The Xbox was launched on November the 14th 2001 and its launch provided Microsoft with their own platform for which to attract developers to make games to (Marshall, 2013).

The subsidiary that handles the video game segment of Microsoft's operations is called Microsoft Studios. They develop and publish games for Microsoft consoles and the PC. Arguably the biggest move that Microsoft made to get in to the video game industry came with the release of the Xbox, but in an interview by John Byrd, CEO of Gigantic Software, the first effort that they made into the market was in 1995 with the release of a then new technology called DirectX. It was meant to be a unified layer for programming all the 2-D and 3-D video cards. It was controversial among video game makers, but despite this, it was a useful innovation, as the alternative was for all video game companies to write drivers for all the 2-D and 3-D card on the market. Microsoft's entrance in to the video game industry was a means to leverage this technology, which at that point already drove most of the top-rated PC-games. Xbox was similar enough to the PC to let developers easily move their titles to the system and game developers played a crucial role in determining the machines specifications. (Thurrot, 2000; Forbes, 2018)

At this time, Microsoft had decided to become a third-party publisher, meaning that they copied, boxed, distributed and marketed games made by developers, as the publishing industry has been described in detail, in the literature review. The person who helped Microsoft start their own gaming studio was Ed Fries. He helped Microsoft Studios grow from tens of employees to well over a

thousand employees in a few years. Their first serious entrance in to the video game industry was the publishing of Age of Empires in 1997, which was developed by Ensemble studios. It was the first game that showcased Microsoft's ability successfully publish original and novel games. Age of Empires was a strategy game where the player could choose from an ancient civilization to play and advance from the stone age to the iron age while battling against the computer or other players. It was in the same genre as Blizzards Warcraft etc. Fans of the series liked the gameplay and its realistic portrayal of civilizations. (Pendergast, 2018; Forbes, 2018)

At this point Microsoft had a reasonably successful game console, a thriving PC games publishing business, brand recognition and excess cash. It was enough to help them through the initial troubles that were involved in launching their own console. After this their gaming business depended on a steady stream of-quality content for their platforms, big-budget TV and media advertising that coincided with new releases and good Metacritic scores. Microsoft is however a firm that's core business is not videogames, but a vast multitude of different information technology related branches, of which arguably the most visible are their operating systems for PCs. This has led to them historically seeing their games business as a means by which to accomplish their other business goals. Outside of Microsoft Studios, their executives have no knowledge of the video game industry and see video games as a means to introduce other products to the consumers living rooms. (Forbes, 2018)

Despite this, their video game division continues to be a buoyant force that can hold their own against their core business. In 2017 their video game business was worth more than 9 billion dollars and was growing profitably. Their video game revenue increased by 3% in to 1,66 billion dollars, which was driven by a higher revenue from software and services, offset in part by lower revenue from Xbox hardware. The software and services revenue was increased primarily due to a higher volume of Xbox live transactions. (Madan, 2017; Forbes, 2018)

When looking at the portfolio of games that Microsoft Studios has rights to, one can see that they have a varied mix of different games. As Microsoft is a platform owner, it is understandable that they have a wide array of different games, and that these games are not necessarily acquired and developed to complement each other. They have a motivation to have as large a customer base for their console as possible. Their strategy and motivations for acquiring firms is relatively different from Activision-Blizzard, who may have better tools to seek complementary effects from their various games and technologies. This is why their acquisition of Mojang makes sense.

Mojang is a video game studio, that has risen to huge popularity from their development of Minecraft. They are a Swedish indie-game company founded by Markus Persson. Interestingly, Persson worked

for King in 2005, and continued working there for 4,5 years after which he joined the video game company Jalbum. In 2010 he co-founded Mojang with Jacob Porsér. Minecraft is a game that is designed to submerge the player into a sandbox world where the player can build, hunt harvest resources and attempt to survive nightly raids from all manner of creatures. Minecrafts graphics were fairly rudimentary, meaning that they could not hold a candle in any way to the high-budget video games of this decade, and were reminiscent of old DOS-games. It has however become an international phenomenon and the best-selling PC-game of all time. Despite its humble beginnings, it is currently visible on computers, tablets, phones and game consoles. There are toys based on Minecraft at local malls, a semiannual convention called MineCon and even an education initiative that's got it in schools called MinecraftEDU. (Techradar.com, 2018; Cox, 2018)

In 2011, one million accounts were registered in the Minecraft servers, after which happened a wave of hype amplified by the games core simplicity and ease of accessibility, saw an increase of 10 million account in just 6 months. In 2011 the gaming space saw the inception of Minecraft Pocket Edition, first to Android and the to IOS. At this time, the absurd sales figures and a growing popularity amongst kids lead to Minecraft branching out. (Mojang, 2018; Cox, 2018)

All manner of Toys and branded merchandise flooded the shelves and the first Minecraft Lego set was released a month after the Xbox edition of the game emerged. The shift to a console was an expected success, and it led to millions of downloads in just a few days, selling 17 000 copies after its May 2012 release. By April 2013 shortly after the release of an educational Raspberry Pi edition of Minecraft, the PC and pocket editions of the game surpassed 10 million sales each. Later the same year, the game's exclusivity to Microsoft elapsed, and versions for PS3, PS4 and PSVita were announced. (Mojang, 2018; Cox, 2018)

As can be seen from the description, Mojang can be described as a truly unique story in the video game industry. The entire game built by a relatively small team, first became an obscure thing with a small cult following that kept on rolling and gaining more users and momentum. After surpassing a critical mass of users, they branched out in to completely separate industries, like toys and education. As Markus Persson tweeted in June 2014 that he was ready to sell his stake in the company the phone of the CEO of Mojang, Carl Manneh, lit up with enquiries if Persson was serious. The company got offers from many big players in the video game industry, but Microsoft ended up winning the, possibly due to them placing the largest bid. (Cox, 2018)

If we were to assess the motivation as to why Microsoft chose to acquire Mojang, the answer seems obvious. Mojang's Minecraft is was very likely highly enticing for any major operator in the video

game industry, simply due to its massive success. It should be noted however, that from the point of view of the theory on mergers and acquisitions and the synergies that are gained from such acquisitions, this is not necessarily a good enough reason to engage in something as costly and as time-consuming as an acquisition. Assessing the motivation behind the acquisition in Microsoft's case is difficult due to the sheer scale of their business, and the different products and businesses that they encompass. Another issue of note is the fact that Microsoft's immense wealth makes it very difficult to even begin to assess the effect that purchasing Mojang has on their business. To put things to scale, the Mojang acquisition cost Microsoft 2,5 billion USD and in their press release they believe that this acquisition will breakeven in 2015, on their website "Microsoft expects the acquisition to be break-even in FY15 on a GAAP basis". Technically this means that Microsoft expects that their investment in Mojang will cause them to gain more money from the acquisition, than if they let the same amount of money sit unused. Another way to describe this is to simply look at Microsoft's financial statement. In 2014 their cash, cash equivalents, and short-term investments amounted to over 85 billion USD, while in the 2015 the same category was worth over 96 billion USD. It is safe to say that the investment that they made in Mojang is in this scale inconsequential. (Gilbert, 2014; Microsoft, 2014)

However, even if the amount is miniscule, it is still worth understanding what the motivation behind the acquisition was, and if they are able to realize the goals that they had for the acquisition. After all, even if the monetary amount is not large in the big picture of things, acquisitions are still highly stressful and workload inducing activities, and they should not be engaged in without good cause. If the acquisition is compared to the theories of Trautwein (1990), it is difficult to place where Microsoft stands in the framework. In the long run, it could be motivated by efficiencies that they see between their own products and Minecraft, and the ability to leverage Minecraft's community to sell their other products, but this is not strictly speaking a synergy. On their webpage in an issue regarding the acquisition, they claim that their investments in cloud and mobile technologies will enable Minecraft players to benefit from richer and faster worlds, more powerful development tools and more opportunities to connect across the Minecraft community. This would seem to hint at technological synergies between the games world and prior existing technologies that Microsoft already owns. On the other hand, they are spreading their customer base and attempting to gain a larger segment of the market as their customers, and also solidify the position of their console by acquiring a highly successful game, which is more akin to the motivation behind the monopoly theory. (microsoft.com, 2014)

When considering the integration approach that had been applied in this case, several things need to be considered. First, the two founding members and the CEO of the company all left with the acquisition. The acquisition was most definitely not hostile, as Markus Persson himself wished for to sell the company and continue on to new projects. A second issue that need to be considered is the fact that Minecraft has a vibrant and very active community of players that are used to modding the game and communicating with developers. This is very likely a major issue in the game's appeal. As the people who have made the company in to what it is have left, it is doubly important for the acquirer to act in a way that the remaining members of the development teams and the community around the game do not choose to leave. That is way at least theoretically, the preservation approach laid out by Ellis & Lamont (2004) seems to be the most efficient approach to integration.

Unfortunately, information on Mojang's financial statement for the year 2014 when the acquisition took place are unavailable online. This is however not necessarily a problem, as the size of the numbers that are presented in Microsoft's financial statement are large enough to drown out the effect of Mojang's assets on the ratio. In 2013 the value of the total assets of Mojang was 1 454 663 kronor and in 2014 it was 2 543 672 kronor (allabolag.com, 2018). When these are translated to euros, they are approximately 160 200 and 280 000 USD respectively. When compared to 172 billion usd in 2014 and the 176 billion USD reported in Microsoft's Financial statements, their effect is negligible.

When ROA is calculated for the numbers of Microsoft alone, in 2014 their return on assets for 2014 was 0,14 or 14,02% .

$$\frac{22074}{142431 + 172384/2} = 0,1402$$

In 2015, after the acquisition, their ROA dropped dramatically in to 0,07 or 7%.

$$\frac{12193}{176223 + 172384/2} = 0,07$$

The drop is fairly dramatic and warrants a closer look at their income statement. The revenue of Microsoft has increased greatly, by over 6 billion USD, but their costs have increased in line with the increase in revenue. Therefore, it can be said that at least in the big picture, they have not gained efficiencies in their revenue for the year 2015. After further investigation, the culprit for the decrease in net income is a category named "Impairment, integration and restructuring" worth 10 billion USD. This is composed of a 7,5 Billion USD goodwill and asset impairment charges related to Phone hardware and 2,5 billion USD of integration and restructuring expenses.

The next measure that has been used to measure acquisition success was revenue growth. As was said earlier, measuring the change of the entire revenue is not informative in this context. However, when looking at the notes in the financial statement, it can be seen that they claim an increase of 1,8 billion USD in D&C and other revenue, which is mainly due to advertising, Xbox live, first-party video games, including Minecraft and Office 365 consumer. The number is still too vast to separate the effect of the acquisition from the mass.

This does beg the question, as to what the actual motives of Microsoft were in acquiring Mojang. Simply looking at the short-term change is probably not effective, and this is indeed one of the problems and limitations in studying acquisitions with accounting measures. There is simply too much noise to actually measure the effect of the acquisition. However, if there are no measurable changes in the short-term, then it can be argued that the acquisition itself may not have been the best possible way to gain whatever goals that had been tried to achieve in this way. There are also no truly clear future prospects as there were in the case of Activision-Blizzard, where the acquisition targeted a clear and successful new growth segment in the market. Microsoft seemed to target one of the most successful products that had ever existed in the market, but they may indeed have arrived to the acquisition too late, when the product is already mature and there is very little that they can actually do to create the synergies necessary to make the acquisition make sense.

6. Conclusions and discussion

The purpose of this thesis was to study the post-acquisition phase of an acquisition in the video game industry and explore the differences between acquisitions. As has been pointed out earlier during this study, mergers and acquisitions are a highly complex phenomenon and no sovereign method for measuring their post-acquisition success has yet been put forward. This does not mean that such a model could not be discovered, indeed it would not be far-fetched to think that perhaps machine learning, AI or systems theory models could perhaps present a model robust enough to measure the variables and interconnected effects in the event, and to plot a roadmap to general guidelines with which a firm could improve their chances of success.

In the literature review, relevant literature on mergers and acquisitions in general were reviewed, with a focus on the different types of acquisitions that could be made, and what the rationale behind such acquisitions are. We further focused on the post-acquisition phase and what issues should be considered in order to gain benefits from the acquisition itself. Different methods for measuring acquisition success were introduced and considered, and accounting measures were chosen as the method to be used in this thesis. The history and structure of the video game industry were also described in detail, in order to understand the relationships between the companies engaging in acquisitions.

In the theoretical review, the studies of Trautwein (1990) and Ellis & Lamont (2004) formed the core theories with which the problem of post-acquisition success and the motivation of the acquirer were compared. Innovation and human resource questions were also addressed as the video game industry operates at a heavily knowledge-oriented environment.

When the theories and the prior research were combined, a rudimentary framework with which to approach an acquisition in the video game industry could be formed. Two acquisition cases were chosen to be evaluated and the primary basis for the choice was that the two cases had to be different on the basis of the possible synergies that the acquirer sought. In other words, the first acquisition was meant to resemble a theoretically strategic acquisition, and the other one was supposed to be more financial in nature. We chose high profile acquisitions in order to mitigate the problems relating to the reliability of the financial statement information, that was stated to be a limitation that needed to be addressed when using accounting measures.

On the basis of the cases that have been presented earlier, it is difficult to answer the research questions without any doubt as to the accuracy of the answer. However, when analyzing the results

gained from the accounting measures, and the context of the acquisitions themselves, it would seem that carefully keeping in mind the synergies and what the acquisition can bring to both sides of the deal is very important. In this case it does seem that Activision-Blizzard seemed to do better with regards to performance. As was stated in the introduction, we cannot project these results to the entire video game industry, but we can say that the more closely linked to the industry that the acquisition dealt with, fared better with the performance measures in question and that this does reconcile with the literature.

As for the second research question, at least in the case of Activision-Blizzard we can see financially sustainable growth, as they managed to keep the efficiency of their operations on the same level as before, while increasing the scope of their operations by increasing revenue. It should be noted that this result is indicative of a well-planned acquisition integration, as if the post-acquisition phase had been executed in a sub-optimal way, we should have noticed inefficiencies that would have been reflected in the measures.

In the case of Microsoft, both measures seemed to fail, but as was stated in the case description, the scale of their business makes it difficult to state that their acquisition was a failure or a success. It can still be said, that as neither measure gained a noticeable increase after the deal, it is relatively difficult to argue that the acquisition could be called a success. After all, the two firms already had a relationship before the acquisition, it is not easy to argue that the change in ownership could have improved this prior relationship a great deal.

The research questions that were set up in the introduction chapter were:

- Is there an observable difference in performance in acquisitions in the video game industry between financial and strategic acquisitions?
- Can sustainable growth be acquired in the video game industry with acquisitions?

The case study provided partial evidence for the first research question. Of the two cases studied, the strategically oriented one fared better with the measures chosen. Therefore, we can say that there is a difference between the two types of acquisitions. Nevertheless, we cannot exhaustively claim, that all strategic acquisitions would fare better than ones with financial motivations. The second question cannot be answered with certainty either. This is part due to the limitations of the measures chosen, and the time-window in which the measures were taken. What can be said however, is that the acquisition did not incur systematic value-destruction, as in the first case we could observe both an increase in revenue, or in other words, growth of the sales of the firm, and also an almost unchanged

efficiency of operations, indicated by the almost unchanged ROA-ratio. Therefore, the hypothesis was answered partially as well. The more strategically oriented acquisition did manage to create growth, but it did not manage to create excess efficiencies. However, as the observation window was relatively short, and therefore any future growth or efficiency improvements are beyond the scope of this thesis.

6.1. Future research

Acquisitions are incredibly complex phenomena and they do not seem to be decreasing in number, despite the fact that on most measure that have been used in the literature, they are not successful. There are many interconnected factors outside and inside the firms that can have an effect on the success, and also there are a great deal of different ways of looking at how the acquisition can be successful. Acquisitions are done for a huge array of different motives and these motives are also factors that affect the measurable success of the deal.

After reviewing the literature, it is the writer's opinion that the methods that are most often a part of the curriculum of a Master of Science in Business Administration, cannot provide any kind of conclusive evidence as to how to measure or predict the success of an acquisition. The environment under which the deal is done is almost reminiscent of weather forecasting, a slight error in one direction can lead to greater errors in further down the process, and the interconnectedness of these errors or successes form a complex tapestry by which the acquisition is observed. As has been noted in the literature review, statistical, accounting and qualitative methods all pose significant limitations when their results are evaluated in relation to an acquisition or a merger. Earlier the advice given to future scholars has been to use combinations of these methods to gain a more robust understanding of the success of the acquisition. In this authors opinion new methods are called for. As the process by which the acquisition takes place and is successful, is potentially highly non-linear, a systems theoretical approach might be more efficient in first modelling the acquisition, then determining the decision-making points at which the acquirer would need to consider their actions. This would be a very long project as a great deal of successful and unsuccessful acquisitions would need to be reviewed and very carefully mapped, but it might work as a kind of roadmap of the relevant decision-making point of the entire process.

References

- Activision.com*. (2008, 7 10). Retrieved from <https://investor.activision.com/news-releases/news-release-details/vivendi-and-activision-complete-transaction-create-activision>
- Alexander, L. (2008, 7 10). *Kotaku.com*. Retrieved from <https://kotaku.com/5023808/activision-blizzard-merger-finalized>
- Alice. (2016, 11 20). *Vicaption.com*. Retrieved from <https://vicaption.com/handbook/get-rich-with-twitch-tips-on-how-to-make-money-streaming>
- allabolag.com*. (2018, 11 15). Retrieved from <https://www.allabolag.se/5568192388/mojang-ab>
- Ansoff, H. I. (1957). Strategies for Diversification. *Harvard Business Review*, 114, pp. 114-124.
- Appelbaum, S., Gandell, J., Yortis, H., Proper, S., & Jobin, F. (2000). Anatomy of a merger: behavior of organizational factors and processes throughout the pre- during-post stages. *Management Decision*, 38, pp. 649-661.
- Baker, H. (1985). The Unwritten Contract: Job Perceptions. *Personnel Journal*, 64, pp. 36-41.
- Barber, B., & Lyon, J. (1997). Detecting long-run abnormal stock returns: The empirical power and specification of test statistics. *Journal of Financial Economics*, 43, pp. 341-372.
- Barney, J. (1988). Returns to Bidding Firms in Mergers and Acquisitions: Reconsidering the Relatedness Hypothesis. *Strategic Management Journal*, 9, pp. 71-78.
- Barton, M., & Loguidice, B. (2008). *Gamasutra: The Art & Business of Making Games*. Retrieved from https://www.gamasutra.com/view/feature/131956/a_his-tory_of_gaming_platforms_.php
- Berger, A. N., & Udell, G. F. (1998). The economics of small business Finance: The roles of private equity and debt markets in the financial growth cycle. *Journal of Banking & Finance*, 22, pp. 613-673.
- Bhuyan, S. (2002). Impact of Vertical Mergers on Industry Profitability: An Empirical Evaluation. *Review of Industrial Organization*, 20, pp. 61-79.
- Birkinshaw, J. B. (2000). Managing the Post-acquisition Integration Process: How the Human Integration And Task Integration Processes Interact to Foster Value Creation . *Journal of Management Studies*, 37, pp. 396-425.
- Bower, J. (2001). Not All M&As Are Alike - and That Matters. *Harvard Business Review*, pp. 93-101.
- Bower, J. (2001). Not All M&As Are Alike - And That matters. *Harvard Business Review*, March, pp. 93-101.
- Brealey, R., M. S., & A. F. (2014). *Principles of Corporate Finance*. Berkshire: McGraw Hill.
- Bruner, R. (2002). Does M&A Pay? A Survey of Evidence for the Decision-maker. *Journal of Applied Finance*, 12, 1, pp. 48-68.
- Campa, J., & Hernando, I. (2004). Shareholder Value Creation in European M&As. *European Financial Management*, 10, pp. 47-81.
- Chatterjee, S. (1986). Types of synergy and economic values: the impact of acquisitions on merging and rival firms. *Strategic Management Journal*, 7, pp. 119-139.

- cl2013mojang.weebly.com*. (2018, 11 14). Retrieved from <https://cl2013mojang.weebly.com/history-of-mojang.html#>
- Cook, J. (2014, 10 20). *Business Insider*. Retrieved from <http://www.businessinsider.com/the-story-of-video-game-streaming-site-twitch-2014-10?r=US&IR=T&IR=T>
- Cox, A. (2018, June 13). *techradar.com*. Retrieved from <https://www.techradar.com/news/the-history-of-minecraft>
- Datapath.io. (2017, 01 20). *Medium*. Retrieved from https://medium.com/@datapath_io/the-history-of-online-gaming-2e70d51ab437
- Datta, D., & Grant, J. (1990). Relationships Between Type of Acquisitions, The Autonomy Given to the Acquired Firm, and Acquisition Success: An Empirical Analysis. *Journal of Management*, 16, 1, pp. 29-44.
- Dignan, L. (2014, September 15). *Zdnet.com*. Retrieved from <https://www.zdnet.com/article/microsoft-buys-mojang-minecraft-five-reasons-it-makes-strategic-sense/>
- Dillow, C. (2011, 5 30). *Fast Company Magazine*. Retrieved from Fast Company webpage: <https://www.fastcompany.com/1752592/brief-history-video-games>
- Dodge, N. (2013). Evolution of the Gaming Experience: Live Video Streaming and the Emergence of a New Web Community. *Elon Journal Of Undergraduate Research in Communications*, 5, 12, pp. 1-9.
- Duhaime, I., & Schwenk, C. (1985). Conjectures on Cognitive Simplification in Acquisition and Divestment Decision Making. *Academy of Management*, 10, 2, pp. 287-295.
- Dyer-Witherford, N., & de Peuter, G. (2006). "EA Spouse" and the Crisis of Video Game Labour: Enjoyment, Exclusion, Exploitation, Exodus. *Canadian Journal of Communication*, 31, pp. 599-617.
- Economides, N. (1996). Network Externalities, Complementarities, and Invitations to Enter. *European Journal of Political Economy*, 12, pp. 211-233.
- Egger, J. (2015, 4 21). *DotEsports*. Retrieved from How exactly do Twitch streamers make a living? Destiny breaks it down: <https://dotesports.com/the-op/news/twitch-streaming-money-careers-destiny-1785>
- Ellis, K., & Lamont, B. (2004). "Ideal" Acquisition Integration Approaches In Related Acquisitions of Equals: A Test Of Long-Held Beliefs. *Advances in Mergers and Acquisitions*, 3, pp. 81-102.
- Fahs, T. (2011, 10 1). *The History of Activision*. Retrieved from Ign.com: <https://www.ign.com/articles/2010/10/01/the-history-of-activision>
- Farrel, J., & Shapiro, C. (1988, June 16). Working Paper. *Horizontal Mergers: An Equilibrium Analysis*. Berkeley, California, United States of America: University of California, Department of Economics.
- Fast Company*. (2018, 7 8). Retrieved from Most Innovative Companies: <https://www.fastcompany.com/company/twitch>
- Forbes*. (2018, July 17). Retrieved from <https://www.forbes.com/sites/quora/2018/07/17/why-did-microsoft-enter-the-video-game-space/#465440de535f>
- Gallagher, S., & Park, S. (2002). Innovation and Competition in Standard-Based Industries: A Historical Analysis of the U.S. Home Video Game Market. *IEEE Transactions on Engineering Management*, 49, 1, pp. 67-81.

- Galpin, T., & Whittington, J. (2010). Merger repair: A conceptual framework for restoring employer/employee relationships. *Journal of Behavioral and Applied Management*, 12, pp. 48-68.
- Galpin, T., Whittington, J., & Maellaro, R. (2012). Identifying, Retaining and Re-Engaging Key Talent During Mergers and Acquisitions: A Best Practices Framework. *People & Strategy*, 35, pp. 42-48.
- Gamesindustrybiz.com*. (2017, December 1). Retrieved from <https://www.gamesindustry.biz/articles/2017-12-1-vivendi-a-third-wheel-in-the-activision-blizzard-union>
- Gautam, A., & Katila, R. (2001). Technological Acquisitions and the Innovation Performance of Acquiring firms: A Longitudinal Study. *Strategic Management Journal*, 22, pp. 197-220.
- Gilbert, B. (2014, 9 19). *engadget.com*. Retrieved from <https://www.engadget.com/2014/09/19/microsoft-buying-minecraft-explanation/>
- Goold, M., & Campbell, A. (1998). Desperately Seeking Synergy. *Harvard Business Review*, 76, 5, pp. 130-143.
- Green, A., Barbin, C., & Schmidt, M. (2007). Stars and Keepers. *Chief Executive*, 230, pp. 44-47.
- Harrison, J., Hitt, M., Hoskisson, R., & Ireland, R. (1991). Synergies and Post-Acquisition Performance: Differences versus Similarities in Resource Allocations. *Journal of Management*, 17, 1, pp. 173-190.
- Haspeslagh, P. C., & Jemison, D. B. (1991). *Managing Acquisitions: Creating Value Through Corporate Renewal*. New York: Free Press.
- Haspeslagh, P. J. (1987). Acquisitions: Myths and Reality. *Sloan Management Review*, 28, pp. 53-59.
- Haspeslagh, P., & Farquhar, A. (1991). *Managing Acquisitions: Creating value Through Corporate Renewal*. New York: Free Press.
- Haspeslagh, P., & Jemison, D. (1991). *Making Acquisitions Work*. Fontainebleau, France: INSEAD.
- Hayward, M. L., & Hambrick, D. C. (1997). Explaining the Premiums Paid for Large Acquisitions: Evidence of CEO Hubris. *Administrative Science Quarterly*, 42, 103-127.
- Himanshu, A. (2013, 5 1). *The Geek Stuff*. Retrieved from What is IP Multicasting? Concept of IP Multicast Address Explained: <https://www.thegeekstuff.com/2013/05/ip-multicasting/>
- Hitt, M., Harrison, J., Ireland, R. D., & Best, A. (1998). Attributes of Successful and Unsuccessful Acquisitions of US Firms. *British Journal of Management*, 9, pp. 91-114.
- Hitt, M., Hoskisson, R., Ireland, D., & Harrison, J. (1991). Effects of Acquisitions on R&D Inputs and Outputs. *The Academy of Management Journal*, 34, pp. 693-706.
- Homberg, F., Rost, K., & Osterloh, M. (2009). Do Synergies Exist in Related Acquisitions? - A Meta-analysis of acquisition studies. *Review of Managerial Studies*, 3(2), 75-116.
- Hook, L. (2012). *The Globe and Mail*. Retrieved from <https://www.theglobeandmail.com/technology/gaming/gaming-news/lenovos-kinect-clone-evades-chinese-ban-on-video-game-consoles/article4104133/>
- Hubbard, G. R., & Palia, D. (1999). A Reexamination of the Conglomerate Merger Wave in the 1960: An Internal Capital Markets View. *The Journal Of Finance*, 54, pp. 1131-1152.

- Jakobsen, M., & Jensen, R. (2015). Common Method Bias in Public Management Studies. *International Public Management Journal*, 18, 1, pp. 3-30.
- Kato, J., & Schoenberg, R. (2014). The Impact of Post-Merger Integration on the Customer-Supplier Relationship. *Industrial Marketing Management*, 43, 2, pp. 335-345.
- Kennon, J. (2018, 8 16). *The Balance*. Retrieved from Understanding a Holding Company: <https://www.thebalance.com/understanding-a-holding-company-357341>
- King, D., Dalton, D., Daily, C., & Govin, J. (2004). Meta-analyses of Post-acquisition Performance: Indications of Unidentified Moderators. *Strategic Management Journal*, 4., pp. 187-200.
- King.com. (2018). Retrieved from <https://discover.king.com/about/>
- Krug, J. (2003). Why Do They Keep Leaving? *Harvard Business Review*, 81, pp. 14-15.
- Kusewitt, J. (1985). An Exploratory Study of Strategic Acquisition Factors Relating to Performance. *Strategic Management Journal*, 6, 2, pp. 151-169.
- Laakso, M., & Nyman, L. (2014). Innovation Opportunities: An Overview of Standards and Platforms in the Video Game Industry. *Technology Innovation Management Review*, pp. 15-21.
- Laine, C. (1995). The Herfindahl-Hirschman Index: A Concentration Measure Taking the Consumers Point of View. *The Antitrust Bulletin*, 40, 2, pp. 423-432.
- Langlotz, A., Rhode, M., & Whaley, C. (2008). *Video Game Industry Overview: An Analysis of the Current Market and Future Growth Trends*.
- Levinson, H. (1976). *The Psychological Man*. Cambridge, MA: The Levinson Institute.
- Loughran, T., & Vijh, M. (1997). Do Long-Term Shareholders Benefit From Corporate Acquisition. *The Journal of Finance*, 52, pp. 1765-1790.
- Lunden, I. (2016, 2 23). *techcrunch.com*. Retrieved from <https://techcrunch.com/2016/02/23/activision-blizzard-closes-its-5-9b-acquisition-of-king-makers-of-candy-crush/>
- Lysenko, M. (2007). *The GPGPU Creation Story*. Retrieved from University of Wisconsin-Madison: sbel.wisc.edu/Courses/ME964/2008
- MacKinlay, C. (1997). Event Studies in Economics and Finance. *Journal of Economic Literature*, 35, pp. 13-39.
- Madan, A. (22, August 2017). *mspoweruser.com*. Retrieved from <https://mspoweruser.com/microsoft-reports-higher-gaming-revenue-xbox-live-users-last-quarter/>
- Maksimovic, V., & Phillips, G. (2002). Do Conglomerate Firms Allocate Resources Inefficiently Across Industries? Theory and Evidence. *The Journal of Finance*, 58, pp. 721-768.
- Marshall, R. (2013, 12 5). Retrieved from <https://www.digitaltrends.com/gaming/the-history-of-the-xbox/>
- Matsusaka, J. G. (1993). Takeover Motives During The Conglomerate Merger Wave. *Journal of Economics*, 24, pp. 357-379.
- Meador, A. L., Church, P. H., & Rayburn, L. G. (1996). Development of Prediction Model for Horizontal and Vertical Merger. *Journal of Financial and Strategic Decisions*, 9, 1, pp. 11-23.

- Meeks, G., & Meeks, J. (1981). Profitability Measures as Indicators of Post-Merger Efficiency. *The Journal of Industrial Economics*, 29, 4, pp. 335-344.
- microsoft.com*. (2014, September 15). Retrieved from Microsoft News Center: <https://news.microsoft.com/2014/09/15/minecraft-to-join-microsoft/>
- Miller, M. (2005, April 1). *InformIT: The Trusted Technology Learning Source*. Retrieved from <http://www.informit.com/articles/article.aspx?p=378141&seqNum=2>
- Mirvis, P., & Marks, M. (1998). *Joining Forces: Making one plus one equal three in mergers, acquisitions, and alliances*. San Francisco: Jossey-Bass.
- Nahavandi, A., & Malekzadeh, A. (1988). Acculturation in Mergers And Acquisitions. *Academy of Management Review*, 13, pp. 79-90.
- Neale, P., Thapa, S., & Boyce, C. (2006). *Preparing a Case Study: A Guide for Designing and Conducting a Case Study for Evaluation Input*. Pathfinder International.
- Paananen, I. (2018, August 2). *Supercell*. Retrieved from Nextchapter: <http://supercell.com/en/nextchapter/>
- Papadakis, V., & Thanos, I. (2010). Measuring the Performance of Acquisitions: An Empirical Investigation Using Multiple Criteria. *British Journal of Management*, 21,, pp. 859-873.
- Pendergast, & Laura. (2018, 11 13). *Microsoftalumni.com*. Retrieved from <https://www.microsoftalumni.com/s/1769/index-social.aspx?sid=1769&gid=2&pgid=252&cid=1771&ecid=1771&crd=0&calpgid=466&calcid=1401>
- Phillips, M. (2008). Desperately Seeking Synergy: An Often Promised, Rarely Delivered Outcome. *The Coastal Business Journal*, 7, pp. 21-26.
- Piske, R. (2002). German Acquisitions in Poland: an Empirical Study on Integration management and Integration success. *Human Resource Development International*, 5, 3, pp. 295-312.
- Plotnikova, E. (2017). *ANALYZING ACQUISITIONS IN THE VIDEO GAME INDUSTRY THROUGH A REAL OPTION LENSE*. Lappeenranta: Lappeenranta University of Technology.
- prnewswire.com*. (2016, February 11). Retrieved from <https://www.prnewswire.com/news-releases/king-reports-fourth-quarter-and-full-year-2015-results-300219027.html>
- Prowse, S. D. (1998). *The Economics of the Private Equity Market*. Dallas: Federal Reserve Bank of Dallas.
- Puranam, P., Singh, H., & Chaudhuri, S. (2009). Integrating Acquired Capabilities: When Structural Integration Is (Un)necessary. *Organization Science*, vol 20, no 2, pp. 313-328.
- Ranft, A. L. (2006). Knowledge Preservation and Knowledge Transfer During Post-Acquisition Integration. *Advances in Mergers and Acquisitions*, 5, pp. 51-67.
- Ray, M. (2014, March 24). *Britannica*. Retrieved from <https://www.britannica.com/topic/Activision-Blizzard-Inc>
- Reed, S. F., & Lajoux, A. R. (1995). *The Art of M&A: A Merger Acquisition Buyout Guide*. New York: Irwin Professional Publishing.

- Rozen-Bakher, Z. (2018). Comparison of Merger and Acquisition (M&A) success in horizontal, vertical and conglomerate M&A: industry sector vs service sector. *The Service Industries Journal*, 38, pp. 492-518.
- Saavedra, J. (2016, March 8). *Den of Geek*. Retrieved from <https://www.denofgeek.com/us/games/overwatch/250326/overwatch-release-date-confirmed-new-trailer>
- Saloner, G., & Shepard, A. (1995). Adoption of Technologies with Network Effects: An Empirical Examination of the Adoption of Automated Teller Machines. *The RAND Journal of Economics*, 26, 3, pp. 479-501.
- Schuler, R., & Jackson, S. (2001). HR Issues and Activities in Mergers and Acquisitions. *European Management Journal*, 19, pp. 239-253.
- Schwenk, C. (1984). Cognitive Simplification Processes in Strategic Decision-Making. *Strategic Management Journal*, 5, 2, pp. 111-128.
- Seth, A. (1990). Value Creation in Acquisitions: A Re-examination of Performance Issues. *Strategic Management Journal*, 11, pp. 99-115.
- Sinclair, B. (2016, February 23). *Gameindustry.biz*. Retrieved from <https://www.gamesindustry.biz/articles/2016-02-23-activision-blizzard-king-acquisition-closes>
- Singh, H., & Montgomery, C. (1987). Corporate Acquisition Strategies And Economic Performance. *Strategic Management Journal*, 8, pp. 377-386.
- Sirower, M., & O'Byrne, S. (1998). The Measurement of Post-Acquisition Performance: Toward A Value-Based Benchmarking Methodology. *Journal of Applied Corporate Finance*, 11, 2, pp. 107-121.
- Statista.com. (2018, May). *2018 Video Game Industry Statistics, Trends & Data*. Retrieved from Statista.com: <https://www.wepc.com/news/video-game-statistics/>
- Sweezy, P. (1937). On the Definition of Monopoly. *The Quarterly Journal of Economics*, 51, pp. 362-363.
- Thanos, I., & Vassilis, P. (2011). The Use of Accounting-Based Measures In Measuring M&A Performance: A Review of Five Decades of Research. *Advances in Merger and Acquisitions*, 10, pp. 105-121.
- Thurott, P. (2000, March 14). *itprotoday.com*. Retrieved from <https://www.itprotoday.com/cloud-computing/microsoft-enter-gaming-industry-x-box>
- TIME. (2014). *A History of Video Game Consoles*. Retrieved from <http://content.time.com/time/interactive/0,31813,2029221,00.html>
- Trautwein, F. (1990). Merger Motives and Merger Prescriptions. *Strategic Journal of Management*, pp. 283-295.
- Tschang, F. (2007). Balancing the Tensions Between Rationalization and Creativity in the Video Games Industry. *Organization Science*, 18, pp. 989-1005.
- Tuch, C., & Noel, O. (2007). The Impacts of Acquisitions on firm performance: A review of the evidence. *International Journal of Management Reviews*, 9, 2, pp. 141-170.
- Tversky, A., & Kahneman, D. (1974). Judgment under uncertainty Heuristics and biases. *Science*, 185, pp. 1124-1131.

- Wadhwa, T. (2017, February 10). *Businessinsider*. Retrieved from <https://nordic.businessinsider.com/activision-blizzard-q4-2016-earnings-2017-2/>
- WePC. (2018, 5). *WePC.com*. Retrieved from 2018 Video Game Industry Statistics, Trends and Data: <https://www.wepc.com/news/video-game-statistics/>
- Williams, D. (2002). Structure and Competition in the U.S Video Game Industry. *The International Journal of Media Management*, 4, 1, pp. 41-54.
- Withenshaw, J. (2003). Successful Termination. *The Canadian Manager*, 28, pp. 20-22.
- Yin, R. (1994). *Case Study Research. Design and Methods*. Thousand Oaks: Sage Publications.
- Zaheer, A., Castañer, X., & Souder, D. (2013). Synergy Sources, Target Autonomy, and and Integration in Acquisitions. *Journal of management*, Vol 39, No 3, pp. 604-632.
- Zenimax. (2018, 10 15). *Zenimax Inc*. Retrieved from <https://www.zenimax.com/library>
- Zollo, M., & Degenhard, M. (2008). What is M&A Performance? *Academy of Management Perspectives*, pp. 55-77.