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Understanding the business model in the video game industry

A case study on an independent
video game developer

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Abstract

Background: Tough competition, time- and resource constraints, and changing consumer demands in the video game industry requires business models that can cope with the pressure.

Purpose: The purpose of this thesis is to use business model framework in order to better understand how independent video game developers develop their business models. We aim to contribute to the development of business model literature within the context of independent video game development by further the understanding of how a business model framework can be utilized in this new context.

Method: A case study method was used, focusing on a single-case and interviews with participants from the case company.

Conclusion: We further develop the BMC by proposing to divide the BMC for independent video game developers into a pre-release and post-release BMC to better describe the business model for an independent video game developer and the business model evolution from pre-release to post-release.

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1. Introduction

1.1 Disposition

This case study represents a master's thesis in Digital Business at Jönköping University. Part one is concerned with introduction of the research study. A background of the video game industry is presented along with a problem statement discussing current issues leading into the purpose. Thereafter the perspective of the study along with delimitations are presented. Following that are definitions and their respective descriptions, which can be of help for the reader to more easily understand the thesis without resorting to external sources.

In the second part a review of the literature is given. Firstly, general literature on business models are presented. Secondly, the business model canvas by Osterwalder and Pigneur (2010) is introduced with the nine building blocks, which is the main theoretical framework used for this case study.

Following the literature review is the methodology and method section. Here the methodology selected for the case is presented, together with case study design, with arguments for why the chosen case in this case study has been selected along with a brief history over the case company. In this section there is as well our thoughts regarding data collection, data analysis, and quality of research.

The fourth part is the empirical findings and interpretation. Here the findings from the interviews are presented according to the separate building blocks of the business model canvas.

The fifth and final section is the conclusion and discussion. Here we conclude the findings, as well as discussing them and suggest possible ventures for future research. Appendices mentioned in the case study can be found after this section.

1.2 Background

The video game industry is one of the most grueling and toughest environments for companies to compete in; short time frames (Sotamaa & Karppi, 2010) and changing consumer demands (De Prato, Feijóo, & Simon, 2014) requires continuous high performances and a business model that contains principles which act as a guiding beacon so as to retain consumers and remain in business. The video game industry has had a tremendous growth during the past two decades and with an increased willingness from consumers to spend more on entertainment products in the video game sector (Carpenter, Daidj, & Moreno, 2014) it has become one of the most profitable areas of the media industry (Davidovici-Nora, 2014; Rayna & Striukova, 2014; Carpenter et al., 2014; De Prato et al., 2014).

The video game industry has seen several paradigms and accompanying shifts throughout its development history (Zackariasson & Wilson, 2010). The introduction of video games in the arcades caused a shift from simply playing pinball to taking part in enjoying electronic entertainment. With the development of the home cartridge, e.g. Atari and Nintendo, the shift was made from playing in the arcades to playing at home, and eventually handheld which led to a change in the structure of the video game industry and increased the market size. The industry went from a vertically integrated company structure to becoming multi-tiered; one branch is built on vertically integrated hardware producers, e.g. Nintendo (with Sony and Microsoft in current times), and another branch on the publishers who provide games for the different platforms, i.e. consoles, personal computer (PC), handheld, as well as distribution and promotion. The final shift, as of now, is with the introduction of massively multiplayer online games (MMOGs) which introduced changes to the way the games are played; moving away from purely offline- and single player games to opening the possibility for thousands of people playing the same game simultaneously. MMOGs also initiated a shift in how the games were distributed and how payments were made, seeing the distribution becoming digital and the payment structure increasingly turning into subscription models (Zackariasson & Wilson, 2010).

Major changes can occur over the course of a year, especially regarding games (Zackariasson & Wilson, 2010). With developments occurring at a higher pace in the

video game industry, industry life cycle changes have become a predominant factor to consider regarding the development of video games.

1.3 Problem

Developing video games and at the same time navigating this complex industry with the aforementioned factors, inevitably lends curiosity as to how video game developers manages to produce and maintain quality while at the same time remaining relevant. The advent of digitalization has brought advantages and disadvantages for both developers and consumers; increased availability of games leads to bigger markets and potentially more consumers, however at the same time consumers faces the potential of becoming overwhelmed by the sheer number of available games. Excelling in quality and differentiating from competitors are guiding principles for any business model regardless of industry. However, for video game developers they have almost become tied to those principles to be able to produce attractive games for consumers and staying in business.

Creating video games is a time consuming and resource heavy activity. Financing is an especially tricky question since it has become somewhat of a double-edged sword in the video game industry (Kuikkaniemi, Turpeinen, Huotari, & Seppälä, 2010). Video game developers are often tied to rely on publishers to fund the development of the game and as well provide them with a large enough time frame to finish development of the project. Independent game developers on the other hand develop games without any financial support from a publisher; everything is self-financed. This creates challenges and opportunities for the independent developer where they have greater freedom, both creatively and with fewer time constraints, they can however not rely on a publisher for financial backing or other associated tasks, e.g. marketing the video game. Specialized knowledge and resource constraints, as in delivering a sophisticatedly sound product with limited resources, combined with a continuous competition for the attention of the buyers to remain in business, poses a particularly interesting situation that independent video game developers find themselves in.

Independent video game developers innovate and iterate their business models when creating new games. Every product development cycle, i.e. game development, is essentially a new start and the business model requires innovation and adaptation for each

new game; through each cycle the business model evolves. It is important to understand how independent video game developers build and innovate their business models throughout this process in order to create an as optimal business model as possible. A good business model is a competitive advantage for companies, and for independent video game developers that face resource restraints and heavy competition within a constantly evolving industry, any competitive advantage is of high importance.

Understanding of business models within the video game industry is a topic that is still underdeveloped from an academic standpoint. Literature that analyzes business models using the video game industry as a perspective is rather sparse. There have been descriptions of the general concept of digital business models for pay-to-play (P2P) and free-to-play (F2P) games (Davidovici-Nora, 2014); insights into how to establish sustainable versus transient competitive advantages for different actors (Carpenter et al., 2014); and the evolution of two major business model paradigms in the video game industry, PC/console and mobile (Rayna & Striukova, 2014).

1.4 Purpose

One perspective which is still lacking from the business model literature for the video game industry is how independent video game developers develop their business models to meet the challenges outlined in the previous sections. A clearer understanding of how independent video game developers develop their business models to create and capture value will help to further develop the business model literature.

The purpose of this thesis is to use business model framework in order to better understand how independent video game developers develop their business models. We aim to contribute to the development of business model literature within the context of independent video game development by further the understanding of how a business model framework can be utilized in this new context.

1.5 Perspective

The perspective of this study is from a producer perspective. We are viewing the current business model of Fatshark Studios, implying that the focus is on the business model which have led to the development of their latest game titles, Vermintide 1 and 2.

The chosen case company for this case study, Fatshark Studios, is an independent video game developer and publisher in Sweden. This entails that they are both developing video games and conducting publishing themselves. Being a single-case study, we are not analyzing any other video game developer or publisher, albeit independent or not. So, the perspective used in writing this thesis has been from the view of Fatshark Studios.

1.6 Delimitations

Video games differ quite substantially from many other industries in the wide variety of shapes and forms that the product can take, e.g. physical or digital, single- or multiplayer. What is also important to distinguish is what you play the game on, whether it be PC, console, or mobile phone. Rayna and Striukova (2014) provided an exhaustive overview of the two major business model paradigms in the video game industry, the PC/console paradigm and the mobile paradigm, and found that they are almost entirely different in almost all components, e.g. value capture and creation. In this thesis, the focus is the PC/console market since the games made by Fatshark Studios are currently solely made for PC and console, as can be seen in the table in section 3.3.1. Thus, the mobile market is not viewed and is therefore excluded from this thesis.

1.7 Definitions

Below is a compiled list of commonly used terminology which can be useful while reading this case study to increase readability for people unfamiliar with abbreviations and terms related to the video game industry. Some definitions are further explained in the case study.

Definition	Description
Video game industry	<i>“Includes all the production activities from the development to the distribution of gaming software and hardware and accessories” (Carpenter et al., 2014).</i>
Video game developer	A software developer specializing in developing video games, involves processes such as programming, art, design, and more (Bethke, 2003; McGuire & Jenkins, 2008).
Video game publisher	A company publishing video games developed either internally by the publisher or externally by a video game developer. This includes responsibility for development, licensing, marketing, and distribution (IGN, 2019).
Independent (indie) video game development	A software developer who self-publish their own games, in varying quality, primarily through digital distribution. They are also not relying on any outside funding for the development of the games (Dutton, 2012).
Digital distribution in video games	Delivering video game content as digital information which can be downloaded by the consumer, rather than to release the games on physical media (Tran, 2014).
Triple-A title (AAA)	Video games with high production quality, using the latest technology, and usually with big budgets, similar to a summer blockbuster movie (Maiberg, 2016).
Free-to-play (F2P)	<i>“A business model for online games in which the game designers do not charge the user or player in order to join the game” (Techopedia, 2019).</i>
Pay-to-play (P2P)	<i>“Online games that customers must pay to access” (Techopedia, 2019)</i>
Steam	Digital distribution platform, developed by Valve Corporation, for purchasing and playing video games, from major publishers to indie studios (Steam, 2019).
PC game	<i>“A video game that is played on a personal computer rather than on a console. The game is controlled using PC input devices such as the keyboard, mouse, joystick, etc. PC games can be played with or without an Internet connection” (Techopedia, 2019)</i>
Console game	<i>“A type of interactive multimedia software that uses a video game console to provide</i>

	<i>an interactive multimedia experience via a television or other display device” (Techopedia, 2019).</i>
Microtransactions (MTX)	<i>“Items or points that a player can buy for use within a virtual world to improve a character or enhance the playing experience. The virtual goods that the player receives in exchange for real-world money are non-physical and are generally created by the game’s producers. In-game purchases are the primary means by which free-to-play games produce revenue for their makers” (Techopedia, 2019).</i>
Downloadable content (DLC)	Additional content which is not included of the initial release of a video game, e.g. costume packs, additional levels, cheat items etc. (Fahey, 2015).
Gamer(s)	<i>“A hobbyist or individual that enjoys playing various types of digital or online games. Generally, a gamer refers to any kind of gaming enthusiast, but when used in IT, the term refers to those that utilize a full range of electronic or digital games” (Techopedia, 2019).</i>
Discord	Voice and text chat application for gamers that can be used on both PC and phone (https://discordapp.com/)
Reddit	A website consisting of thousands of communities where people post, vote, and comment about various topics of interest (Redditinc, 2019).

Table 1. Definitions and descriptions.

2. Literature Review

Business models are a topic that have garnered strong academic interest in recent years. An analysis by Wirtz et al. (2015) found through an Ebsco database analysis that published articles in peer-reviewed journals that mentioned business model in their title or abstract increased from 51 in the year 2000, to 380 in 2013.

There are many advantages in having a good understanding of and clearly articulated business model; in a dynamic environment, being able to pivot the business model instead of recreating it can lead to better value creation and capture (Hacklin, Björkdahl, & Wallin, 2018); allowing the development of technology which create customer value, either directly matching customer needs or emerging from customers directly, can require elements of the business model to be changed (Hienerth, Keinz, & Lettl, 2011); in terms of value creation and capture for firms regarding technology, the choice of business model is influential in combination with the perceived business model that managers have since it has an impact on the way technology is developed (Baden-Fuller & Haefliger, 2013).

Despite the consensus of the importance of business models and the academic interest and increased research; there has not yet emerged a unified consensus on the definition of business model (Casadesus-Masanell & Ricart, 2011; Foss & Saebi, 2018). Table 2 contains a list of various definitions of a business model.

Author	Business Model Definition
Amit & Zott (2001)	<i>“depicts the content, structure and governance of transactions designed so as to create value through the exploitation of business opportunities”</i>
Timmers (1998)	<i>“an architecture for the product, service and information flows, including a description of the various business actors and their roles; a description of the potential benefits for the various business actors; a description of the sources of revenue”</i>
Magretta (2002)	<i>“answers Peter Drucker's age-old questions: Who is the customer? And what does the customer value? It also answers the fundamental questions every manager must ask: How do we make money in this business? What is the underlying economic logic that explains how we can deliver value to customers at an appropriate cost?”</i>
Teece (2010)	<i>“articulates the logic, the data and other evidence that support a value proposition for the customer, and a viable structure of revenues and costs for the enterprise delivering that value.”</i>
Wirtz, Pistoia, Ullrich, & Göttel (2015)	<i>“a simplified and aggregated representation of the relevant activities of a company. It describes how marketable information, products and/or services are generated by means of a company's value-added component. In addition to the architecture of value creation, strategic as well as customer and market components are taken into consideration, in order to achieve the superordinate goal of generating, or rather, securing the competitive advantage.”</i>

Table 2. List of different business model definitions.

Despite this confusion and lack of a common definition of what exactly the definition of a business model is, many authors agree that a good business model can be a competitive advantage (Magretta, 2002; Teece, 2010; Casadesus-Masanell & Ricart, 2011; Wirtz, Pistoia, Ullrich, & Göttel, 2015).

While there is no agreed upon definition, there are no doubt similarities in these definitions. Ritter and Lettl (2018) identified five different perspectives on the term “business model”: business-model activities, business model logics, business model archetypes, business-model elements, and business-model alignment. These five perspectives showcase how authors frame and describe the concept of business models: as a description of the activities of a firm, a description of a firm's underlying core logic, typical models of value creation and value capture that transcend industry boundaries, a structuring of the business models on the basis of essential elements that capture the important parts of a business and how the pieces of a business fit together (Ritter & Lettl, 2018).

In order for managers to improve the business model of their company, it is important that they first understand their own business model. The business-model elements perspective is well suited for this task as it is *“a perspective on business models taken by authors who propose structuring business models on the basis of essential elements in order to capture the important parts of a business”* (Ritter & Lettl, 2018). This perspective alone will not fully contain and describe all aspects of a business model, these frameworks contain all necessary elements to capture the essence of a business, but they do not describe the logic of the business model (Ritter & Lettl, 2018). It is however a logical and practical perspective for managers to use to better understand their business model.

A business model is a powerful concept and competitive advantage for managers to understand, it is however not a static model and keeping the business model viable is likely to be a continuing task due to internal or external changes over time (Teece, 2010; Wirtz et al., 2015). If managers want to experiment with and innovate their business models, one approach is to construct maps of the business models, to clarify the processes underlying them and which allows them to become a source of experiments (Chesbrough, 2010). The business model elements perspective is a well-suited perspective for this challenge.

There exist multiple business model frameworks, some of which are based in the business model elements perspective. Johnson et al. (2008) suggest a framework with 4 elements:

customer value proposition, profit formula, key resources and key processes. Rayna and Striukova (2014) propose a value-centric framework with: value proposition, value creation, value delivery, value capture and value communication in an analysis of the video game industry.

2.1 Components of the business model

A framework which have seen increasing usage is the business model canvas (BMC) developed by Osterwalder and Pigneur (2010), which contains nine elements used for depicting and describing business models of companies. The BMC falls under the perspective of business-model elements, as it suggests a structuring of the business model according to the most essential elements (Ritter & Lettl, 2018). What is also important to note is that the BMC does not describe the logic of the business, instead the logic of the business model is implicit in the design of the elements.

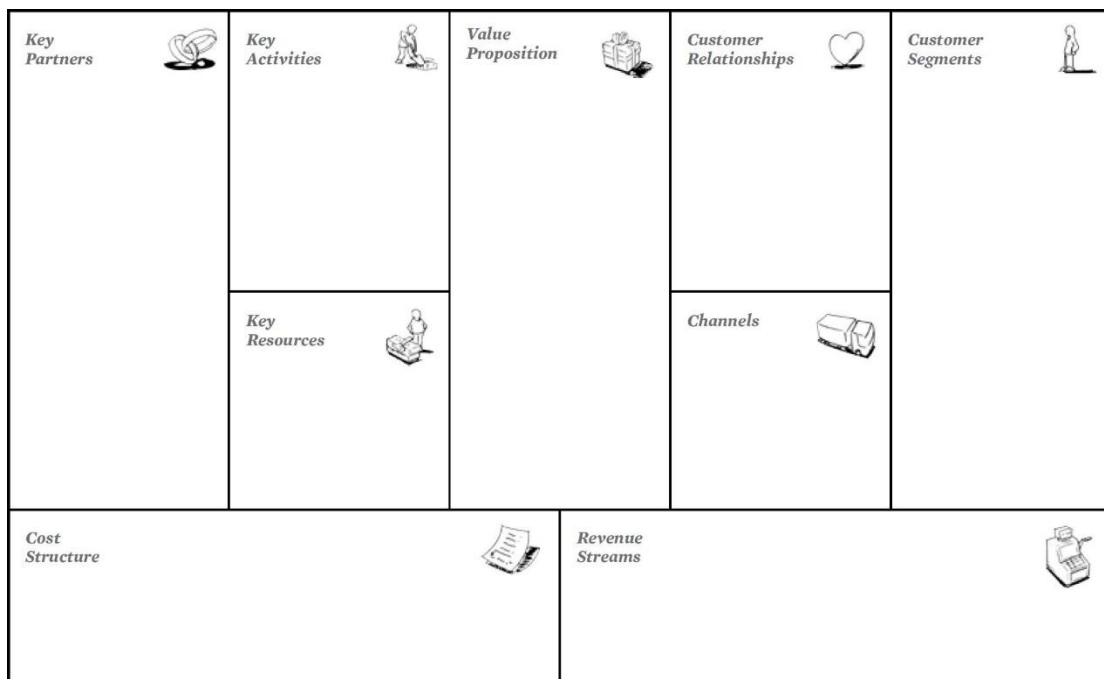


Figure 1. The business model canvas (Osterwalder & Pigneur, 2010).

A business model canvas (BMC) is a business-model elements perspective where the underlying idea is to ensure all necessary elements are described in order to capture the essence of a business (Ritter & Lettl, 2018). A BMC helps in visualizing the processes of a business model and thus helps in making theoretical considerations of configuring elements of a business model far more concrete (Chesbrough, 2010).

Our business model framework of choice is the business model canvas developed by Osterwalder and Pigneur (2010). It contains nine elements: customer segments, value propositions, channels, customer relationships, revenue streams, key resources, key activities, key partnerships and cost structure. The BMC is one of the most well-known and referenced business model frameworks and arguably the most successful business model framework with adoption by both practitioners and researchers.

2.1.1 Customer Segments

Customer segments define the different groups of people or organizations a company aim to serve (Osterwalder & Pigneur, 2010). At the heart of all businesses are their customers, it is therefore important for corporations to correctly identify their customer segments. These different customer segments may have differing customer needs and by identifying this, corporations can better serve their customers.

The customers represent separate segments if their needs require and justify a distinct offer, they are reached through different distribution channels, they require different types of relationships, they have substantially different profitability, and they are willing to pay for different aspects of the offer (Osterwalder & Pigneur, 2010).

2.1.2 Value Propositions

According to Osterwalder and Pigneur (2010) the value proposition describes the bundle of products and services that create value for a specific customer segment. This segment is the reason why customers choose one product over another. There are many elements in the value proposition that can make the product valuable for the customers. The performance over competitors may be superior, it can offer superior customizability for each individual customer or it may be something as simple as the brand. While Rolex watches are no doubt high-quality watches, a large portion of their value proposition is in signaling wealth by brand recognition.

Given how many authors define a business model around a value/customer approach (Osterwalder, Pigneur, & Tucci, 2005), it shows how these elements are highly valued in the general business model discussion.

2.1.3 Channels

The channels element describes how a company communicates with and reaches its customer segments to deliver a value proposition (Osterwalder & Pigneur, 2010). The channel element is critical for corporations; a badly optimized channel structure may severely hamper a corporation if the customer is e.g. unaware of the value proposition or receive suboptimal post-purchase customer support.

Osterwalder and Pigneur (2010) present five distinct channel phases: awareness, evaluation, purchase, delivery, and after sales. They further distinguish between direct and indirect channels as well as owned and partner channels.

2.1.4 Customer Relationships

Customer relationships describe the type of relationships a company establishes with specific customer segments (Osterwalder & Pigneur, 2010). These customer relationships may vary between different customer segments and they can be driven by customer acquisition, customer retention and boosting sales (upselling).

Osterwalder and Pigneur (2010) distinguish between several categories of customer relationships which can co-exist with each other, e.g. personal assistance, self-service, communities and co-creation. A company can maintain several of these relationships with a single customer segment if deemed necessary.

2.1.5 Revenue Streams

The revenue streams represent the cash a company generate from each customer segment. For what value is each customer segment willing to pay? Successfully answering that question allows the firm to generate one or more revenue streams (Osterwalder & Pigneur, 2010). Osterwalder & Pigneur (2010) distinguish two different types of revenue streams that can be included in a business model: transaction revenues from one-time customer payments, and recurring revenues from ongoing payments to either deliver a value proposition to customers or provide post-purchase customer support.

2.1.6 Key Resources

This element of the business model canvas describes the most important assets required for to make the business model work (Osterwalder & Pigneur, 2010). The key resources are what enables all other aspects of the business model. To create and offer the value proposition, maintaining relationships, reach markets and earn revenues (Osterwalder & Pigneur, 2010). These key resources take many different shapes and they are not necessarily identical or even similar for competitors within the same industry.

Osterwalder and Pigneur (2010) categorize these key resources in four groups: Physical, e.g. manufacturing facilities, buildings, vehicles and distribution networks; Intellectual, e.g. brands, proprietary knowledge, patents and copyrights; Human and Financial.

2.1.7 Key Activities

The key activities describe the most important activities that a company must do to make its business model work (Osterwalder & Pigneur, 2010). This element differs greatly between companies and is very specific to what each company does. Osterwalder and Pigneur (2010) categorize key activities into production, problem solving and platform/network.

2.1.8 Key Partnerships

Key partnerships describe the network of suppliers and partners that make the business model work (Osterwalder & Pigneur, 2010). Partnerships is an important factor for many business models, it can help acquire new resources, reduce risk, and overall improve the business model. Osterwalder and Pigneur (2010) distinguish between four different types of partnerships: Strategic alliances between non-competitors, Coopetition – strategic partnerships between competitors, joint ventures to develop new businesses, and buyer-supplier relationships to assure reliable supplies.

2.1.9 Cost Structure

Creating and delivering value, maintaining customer relationships and generating revenue all incur costs; the cost structure describes all costs incurred to operate a business model (Osterwalder & Pigneur, 2010). The business model or companies dictate what type of cost structure to use. While corporations should aim at keeping costs as low as possible,

this is more important for some businesses than others. Osterwalder & Pigneur (2010) distinguish between two extreme types of cost-structures and state that most business models fall in between cost-driven and value-driven.

Cost-driven business models focus on minimizing costs as their value-proposition. This is easier when there are no large discrepancies in the product offered and price is the driving factor behind consumers' choice of brand. Value-driven cost structures are often characterized by premium value propositions and a high degree of personalized service, e.g. luxury hotels (Osterwalder & Pigneur, 2010).

2.2 Business models for video game developers

This section will outline what we know regarding business models within the video game industry. No research has, as of yet, conducted an extensive analysis of the video game industry through the context of the BMC, as has been conducted in other industries. This section will nonetheless follow the structure of the BMC and the previous section (2.1) in order to frame our current knowledge regarding business models of video game developers.

There exists many articles that are focused on the history and evolution of the video game industry and how different concepts have evolved over time. At the same time, there exists fewer articles that focus on analyzing the current state of the industry and business models of the corporations operating within the industry. This could potentially be partially explained by the continuously rapid evolution of the industry and the rate at which such an analysis become outdated.

2.2.1 Customer Segments

The business model literature regarding different customer segments within the video game industry has, as of yet, focused on broad generalizations and segments. The three different segments that are commonly distinguished are PC gamers, console gamers and mobile gamers (Carpenter et al., 2014; Rayna & Striukova, 2014; De Prato et al., 2014; Davidovici-Nora, 2014). These segments may be grouped by authors with PC/Console as one distinct customer segment and mobile as another (Rayna & Striukova, 2014).

Alternatively, some authors group all three different segments separately (Carpenter et al., 2014).

Some researchers have further studied these identified large segments. In 2013, the average age of console game consumers in the United States was found to be 37 years, and 42% of players were women (Marchand & Hennig-Thurau, 2013).

2.2.2 Value Proposition

Value creation is at the core of the business model for any company (Magretta, 2002; Chesbrough, 2010). How video game developers create this value varies depending on many factors, e.g. F2P and P2P companies create value in different ways for the consumer (Davidovici-Nora, 2014). There has been a relatively large focus for researchers on value creation within the video game industry, there has however been some research on the value proposition specifically.

Rayna and Striukova (2014) have studied value proposition in the context of video games and outlined how the value proposition has evolved from a pure product offering to a greater mix between product and services. They further distinguished how the PC and console markets are closer to the original paradigm of selling games, while the mobile market have adopted far more innovative value propositions.

2.2.3 Channels

The channels through which video game developers communicate with their customers have seen an evolution in recent times. There are several functions that channels between a video game developer and their customers serve, with one being advertising. Pre-release advertising serves as a critical role, and game producers devote a substantial portion of their advertising budget to the time prior to a new game's release (Marchand & Hennig-Thurau, 2013). For PC and console games, value communication has generally been through communication channels, e.g. ads in magazines and television. The availability of more communication channels, in particular social media, has enabled independent developers to communicate about their games to a large audience (Rayna & Striukova, 2014).

To the best of our knowledge, there have been almost no research conducted on how video game developers communicate with their customers beyond the channels related to marketing activities.

2.2.4 Revenue Streams

The revenue streams of an independent video game developer takes many forms and could be classified within three different groups; pay to play models (P2P), free to play models (F2P), and hybrid models (Davidovici-Nora, 2014). The F2P model is a relatively new way of monetizing games. It is introducing games as a service with monetization taking place during the game which in turn drives the developer and publisher to keep the gamer online as long as possible (De Prato et al., 2014).

The F2P model of video games have evolved from a structure where the game was supported by ads to a model where the game is free, but the player can buy additions within the game to enhance their gaming experience (Davidovici-Nora, 2014)

The P2P model follows a more traditional structure where the player pays a premium price for having access to a unique and all-encompassing service (Davidovici-Nora, 2014).

Davidovici-Nora (2014) outline a trend in digital business models where monetization is moving towards a combination of the two models and options. Where the revenue models enable developers to deliver a richer and more customized experience to players. Some of the examples highlighted are Red Dead Redemption, Diablo 3, Minecraft and World of Warcraft. The revenue models for these games consist of an initial unit price for the game followed by a subscription fee for the game, purchases to enable modding or customization of the game, or additional services. The hybrid model enables more continuous revenue streams for the video game developers.

2.2.5 Key Resources

Carpenter et al. (2014) identified several key success factors that were relating to game console manufacturers, publishers, and video game studios; the most noticeable were financial strength, technological excellence, and creativity which were regarded as important and crucial for these types of companies. Technological excellence and

creativity are elements of a video game developer and not a key resource. However, both of these factors stem from the human resources that the developer possess.

2.2.6 Key Partners

There are many partners within the video game industry and depending on your role within the industry, who your key partners are will vary. In the case of video game developers, publishers (Zackariasson & Wilson, 2013) or distributors (Rayna and Striukova, 2014; Marchand & Hennig-Thurau, 2013; Carpenter et al., 2014) are crucial partners for the video game developer. The publisher, in many cases, directly distributes games, without the need for a distributor to act as intermediary between the publisher and the retailer (De Prato et al., 2014).

With the shift from physical to digital distribution within the video game industry (Marchand & Hennig-Thurau, 2013) and proliferation of distribution channels (Rayna and Striukova, 2014) the relationship between distributors and developers have changed. Recent research have discussed the challenges of the evolution of how distribution within the video game industry works (Marchand & Hennig-Thurau, 2013). Regardless of the shift in how partnerships within the industry works, distribution have been found to be a key success factor for actors within the video game industry (Carpenter et al., 2014).

2.2.7 Additional elements of the BMC

The business model literature that mentions cost structure, customer relationships and, to some extent, key activities do this indirectly. The current state of knowledge regarding the specifics of what is involved in these three elements of the business model of video game developers is rather underdeveloped.

3. Methodology and Method

3.1 Qualitative research

Qualitative research is the method of choice for allowing researchers to conduct in-depth studies about a broad array of topics (Yin, 2011). Selecting topics for doing a qualitative research study is given with a greater freedom since other methods can be constrained by several factors, e.g. inability to establish necessary research conditions (for an experiment) or the unavailability of sufficient data series (for an economic or political science study). Defining qualitative research in a simple manner is according to Yin (2017) not very straightforward since it can be likened to other terms of the same genre, e.g. psychological or sociological research. Each term implies a diverse range of research styles within their separate extensive fields, and thus they embrace a variety of contrasting methods. Moving away from a simple definition, Yin (2011) proposes that researchers consider five features which distinguish qualitative research from other forms of social research:

1. Studying the meaning of people's lives, in their real-world roles: doing research with pre-established questionnaires will most likely limit respondents answers and they cannot say what they want to say. Qualitative research, with social interactions, will transpire with minimal intrusion by artificial research procedures, and people can voice their opinion more freely.
2. Representing the views and perspectives of the people in a study: devoting priority to representing the views and perspectives of a study's participants makes qualitative research different from other types of research. The ideas and events emerging from qualitative research can represent the meanings given to real-world events by the people who live them, and not be distorted by researchers who hold different values or meanings. Being able to capture these perspectives can potentially be a major purpose of a qualitative study.
3. Explicitly attending to and accounting for real-world contextual conditions: embracing contextual conditions, i.e. social, institutional, cultural, and environmental conditions, within which people's lives take place is something qualitative research

explicitly does. Contextual conditions can in many ways have a strong influence in all human affairs, however it is difficult addressing these conditions in other social science research methods, except for history.

4. Contributing insights from existing or new concepts that may help to explain social behavior and thinking: having an eagerness to explain social behavior and thinking, through either existing or emerging concepts, is what qualitative research is driven by, as well as being used as an arena for developing new concepts.
5. Acknowledging the potential relevance of multiple sources of evidence rather than relying on a single source alone: Collecting, integrating, and presenting data from a variety of sources of evidence as part of any study is a value qualitative research acknowledges, which is also a methodological benefit in the ability to triangulate and create converging lines of inquiry among the different sources.

Building from the five features, it can also be of interest to mention and briefly discuss alternate worldviews, or interpretations, in relation to research. Two of the most frequently used perspectives are positivism and constructivism (Yin, 2011). Positivism, also known as realistic perspective, focuses primarily on viewing the world as a single reality, that you are conducting value-free research, searching for time- and context-free findings, and is the primacy of cause-effect investigations. Whereas for constructivism, also known as relativistic perspective, focuses on the opposite; there exist multiple realities, research is value-bond, there is a limit to time- and context-specific findings, and is irrelevant of cause-effect investigations. However, simply choosing one of these perspectives may seem a bit determinative and that you as a researcher are cornering yourself off to specific findings due to them not concurring with your chosen worldview. One perspective which have emerged is known as the middle ground (Yin, 2011), which have more adaptability for qualitative research since it is not relying solely on either the positivist or constructivist perspective. For this study, the middle ground will be the chosen world view since it will offer greater freedom and not hinder in interpreting the data.

Another very important aspect to consider when doing qualitative research is the possibility of rival explanations, which are not simply just alternative explanations. Yin

(2011) suggests researchers to think of one's findings and interpretations as adversaries which can be challenged by one or more rivals. If a rival is more plausible than the original interpretation, the original interpretation has to be rejected. A constant rival during data collection is the possibility that the information given and received might be misleading or misguided, and that other settings or interviews may have potentially offered better points of view. Continually assessing and testing rival explanations, and having a skeptical frame of mind, during all steps of doing a study results in a stronger final product.

3.2 Case study design

For this research study, a case study design will be utilized to answer the research purpose. According to Yin (2017) a case study is defined according to its scope and features, and *“is an empirical method that investigates a contemporary phenomenon (the “case”) in depth and within its real-world context, especially when the boundaries between phenomenon and context may not be clearly evident”*. Choosing to do a case study is for researchers an opportunity to understand a real-world case, and as well see the involvement of contextual conditions and how they apply to the case (Yin & Davis, 2007). Case study research differs from other types of research in that with its focus on both scope and features comprises an all-encompassing mode of inquiry, in combination with having its own logic of design and data collection techniques, as well as specific approaches to data analysis (Yin, 2017).

When doing a case study, there is also the choice between doing a single-case study and a multiple-case study. There are both advantages and disadvantages to the two options, such as multiple-case study design having evidence which is more compelling, or that the rationale for single-case designs cannot usually be satisfied by multiple-case study (Yin, 2017). For single-case designs there is also the choice of whether to do a holistic or embedded study. An embedded single-case study includes multiple units of analysis within the single-case, while the holistic single-case study examines the global nature of an organization with a focus on a single unit of analysis. A common pitfall with using a holistic design is that the single-case study may become too abstract in that it lacks clearly specified measures (Yin, 2017). For single-case studies there is also a common concern

about the uniqueness or artificial conditions which may surround a case, e.g. having special access to a key informant.

For this case study, we have chosen an embedded case study design. The rationale behind this choice is that we are viewing the business model of the case company at a given point in time through the framework of the BMC. The chosen case company, which will be presented in section 3.3.1, are an independent video game developer and produces multiple video games, as can be seen in table 3. The business model for a video game can differ from one game to another, depending on the choices made in the development cycle. Therefore, we would argue there exists multiple units of analysis, with each single game being a potential unit of analysis. In this case study, we are focusing on the case company's most successful titles, Warhammer: End Times - Vermintide 1 and 2, which are highlighted in table 3.

According to Yin (2017), the single-case study is an appropriate design under several circumstances, and there exist five different single-case rationales (critical, unusual, common, revelatory, and longitudinal) to further delineate the choice of the case. The case we have chosen is best described as being a common case, i.e. the goal is to capture the circumstances and conditions of an everyday situation, since it might provide lessons about social processes related to some theoretical interest. However, describing the case as a critical case is also a possibility; a critical case is a case which is critical to one's theory or theoretical proposition. An additional benefit of the single-case study is that it can represent contributions to knowledge and be theory building by either confirming, challenging, or extending the theory on a topic (Yin, 2017).

Doing case study research is not a simple and straightforward process, and there exists some general concerns about a few various aspects which needs to be addressed (Yin, 2017). Firstly, there is the concern of whether the researchers have been rigorous enough in following systematic procedures or allowed for uncertain evidence to influence the findings and conclusions. Secondly, there is the question of how much generalization can be done from case studies since they are generalizable to theoretical propositions and not populations. This should be kept in mind when considering conclusions that the goal is to expand and generalize theories, not to extrapolate probabilities. Thirdly, case study

research is considered to have a comparative advantage in comparison to other research methods, e.g. randomized control trials. Randomized control trials are very good in explaining for example the effectiveness of something, however they are limited in explaining how and why, which case studies are excelling in. Cook and Payne (2002) suggests that case studies may be considered and valued “*as adjuncts to experiments rather than as alternatives to them*”. Case studies should not be thought of as a sample, it should instead be viewed as an opportunity to bring some new empirical light to theoretical concepts or principles (Yin, 2017).

3.3 Case selection – independent video game developers

To be able to bring new empirical light to the chosen theoretical concept we decided to investigate independent video game developers. There are several reasons to be mentioned that qualifies the chosen arena and specific case as suitable for a holistic single-case study. As have been briefly touched upon in the background section, video game developers are competing in an industry which is stricken by fierce and tough competition in which they are at the mercy of subjective opinions from customers. With development periods ranging up to several years, the need for having a successful title is of grave importance for the continuation of the company. One ill-received game can for an independent developer mean the end of business if they have no back catalogue to ensure financial security until the next release. Additionally, developing high quality video games is a constant iterative and creative process which requires specific expertise in a variety of fields, e.g. coding, 3D design, sound, and many more. Steering this ship of wide range of expertise in the direction which result in a final product, which is either praised for its qualitative craftsmanship or discarded for its lack of it, provides an arena which is of great interest to research. This process can be seen, or reflected, in the business model. With the aim of this thesis being to use a business model framework to understand how independent video game developers develop their business models, applying the BMC in practice will further increase the understanding of this complex field.

3.3.1 History of Fatshark Studios

Fatshark Studios was founded in 2008 in Sweden and were in the nascent stages developing video games as consultants, either through taking parts of projects or maintaining games (Fatshark Games, 2018). Subsequently, as capacity and experience

grew, the company were able to accept entire productions commissioned by publishers, however the goal was always to finance, produce and self-publish video games which have in the past been done irregularly (as can also be seen in table 3 below). The company co-founded a game engine called Bitquid in 2009, which was acquired by the company Autodesk in 2014. The sale of Bitsquid allowed for Fatshark to self-finance their first self-published AAA-quality game called Vermintide: End Times – Vermintide. In combination with developing their own video games, the company is also starting to help smaller indie studios with publishing and working together as a collaborative partner. Today the company have around 80 employees with the majority of those focused on video game development, while a minority is working with marketing and administrative tasks.

On the following page is a table of the games produced by Fatshark Studios, noting whether the games have been only developed, or developed and self-published.

Title	Publishing & Development	Release date	Platform
Lead and Gold	Only developed	April 8, 2010	PC, PS3
Bionic Commando Rearmed 2	Only developed	February 1, 2011	Xbox 360, PS3
Hamilton's Great Adventure	Self-published & developed	May 31, 2011	PC, PS3, Android
Krater	Self-published & developed	June 12, 2012	PC, MAC
War of the Roses	Only developed	October 2, 2012	PC
War of the Vikings	Only developed	April 15, 2014	PC
Escape Dead Island	Only developed	November 21, 2014	PC, Xbox 360, PS3
Hamilton's Puzzle Run	Self-published & developed	January 13, 2015	Amazon Fire TV
Bloodsports.TV	Self-published & developed	April 8, 2015	PC
Warhammer: End Times – Vermintide	Self-published & developed	October 23, 2015	PC, Xbox One, PS4
Cobalt	Only developed	February 2, 2016	Xbox 360, Xbox One
Warhammer: End Times – Vermintide 2	Self-published & developed	March 8, 2018	PC, Xbox One, PS4

Table 3. List of titles produced by Fatshark Studios. Sourced from fatsharkgames.com/games/.

3.3.2 Selection of case company

Fatshark is an independent video game developer which have developed a very successful franchise, the Vermintide games starting with release in 2015. An independent video game developer does not rely on any outside financing or support to develop their games. Transforming an idea into a final product is in video game development a long and iterative process involving numerous people and stages. Succeeding with an idea and reaching global success is a somewhat rare occurrence, especially for an independent developer which does not rely on a publishing powerhouse.

There are relatively few video game developers operating out of Sweden and even fewer still that have reached a reasonable level of success that would enable us to consider their business model a good, well-developed and successful business model. We reached out to these identified companies and found Fatshark to be the most willing to engage and participate with our research. We therefore chose them as a case company because we believed that they would provide the richest information and be the most suitable company to study for us at the current time.

The success aspect may cause concern of whether the case is actually an unusual case instead of a common case, as argued in section 3.2. However, the aspect of reaching success in terms of sales with a video game is very difficult to discern. A game may potentially be well-produced and give the user a fun experience, yet not reach the same success of a game with lesser quality production-wise. So, what is investigated upon are the factors which goes in to developing video games, i.e. the regular everyday activities, which are different from one developer to the other due to making distinctive video games. As the common case describes the circumstances and conditions of an everyday situation (Yin, 2017), it is the most suitable choice to describe the activities of a video game developer.

3.4 Data collection

Doing an in-depth study of a phenomenon in its real-world context is one of the basic motives for doing case study research (Yin, 2017). Strengthening claims made in such research is best done through utilizing multiple sources of evidence. The type of data that needs to be collected to cover events happening over a period of time, ensuring that the case study will be in-depth and contextual, have to be of a large variety and rely on multiple sources. This case study relies on primary data gathered from interviews with employees of Fatshark Studios, which is contextualized within the theory with secondary data retrieved from physical and online resources explained hereafter.

3.4.1 Interviews

Interviews can be performed in a number of ways and types; however, they are commonly described as either structured interviews or qualitative interviews (Yin, 2017). As a qualitative researcher, the aim is to not adopt a specific demeanor for every interview and to let the interview itself be more of a guided conversation. With doing a holistic single-case study, the natural choice to gather rich primary data is through qualitative in-depth interviews. The objective of doing a qualitative interview is to discover and explore a topic through asking a series of questions with a specific purpose (Charmaz, 2014). Conducting qualitative interviews enables the access to information which could only otherwise be speculated about if not gathered directly from research participants. Not only are qualitative interviews used for the previously mentioned purpose, however they are as well an opportunity to gain the respondents perspective on the given topic and to understand why they have a specific viewpoint (King, 2004). As mentioned earlier, to support the findings made, multiple sources of evidence is necessary. Regarding and using multiple sources of evidence in case study research has been found to be rated more highly in overall quality than compared with relying on single sources of information (Yin R. K., 1985). Evidence from multiple sources also gives the opportunity develop converging lines of inquiry, a critical methodological practice (Yin, 2017).

3.4.1.1 Triangulation

Using multiple sources of evidence is also known as triangulation (Yin, 2017). Patton (2015) discusses four types of triangulation which can be done from different perspectives; data triangulation, investigator triangulation, theory triangulation, and methodological triangulation. The type which is of highest relevance is data triangulation, where the primary goal is to develop convergent evidence through using multiple measures of the same phenomenon (Yin, 2017). What is important to mention is the concern of using evidence about the internal processes of the chosen case company primarily coming from interviews with employees of the company. For this case study, using multiple sources of evidence that are not coming directly from the interviews with employees, to support and strengthen the findings and conclusions, are difficult to find. For what is investigated in this case study are internal processes of video game development, and information from other sources than the interviews which describe the various internal processes are not easily accessible. Partly because they may contain sensitive information, and partly because they may also not exist, due to the development process being highly creative and iterative. The evidence that is available, besides what is found from interviews, are news releases which can support statements made about important stages in the history of the company, e.g. game releases and number of sold games.

3.4.1.2 Initial contact

The initial contact was made through an email sent to Fatshark Studios in which we explained our research, the purpose, and what was sought from conducting interviews. This led us to come in contact with Rikard Blomberg, CTO & Deputy CEO of Fatshark, which was our first interviewee and conducted face-to-face, and who also helped us to come in contact with other employees of Fatshark. Following the first interview had been conducted, we asked Rikard if he potentially knew of any more employees who could be willing to participate in interviews. There were probably more who could be of interest, and we were asked by Rikard to compose a short description of our research, separate from the one we described in the email we sent initially, which he then posted in their in-house communication channels to gauge interest for participation in our study. From this we then gathered several leads, namely Harri Saari (Marketing Director) and Joakim Wahlström (Technical Director), which we followed up with contacting and telling about our research, and ultimately interviewing.

Here we believe it is important to mention various sampling methods and our thoughts concerning what is most relatable to what has been done in this case. When selecting interview participants, the aim should always be to have a broad set of information and participants to maximize information, i.e. have a maximum variation sample (Lincoln & Guba, 1985; Yin, 2011). With a maximum variation sample, a high priority is to include sources which may offer discordant evidence or views, as to strengthen the study and reduce bias. One could possibly argue between the sampling methods used in selecting interview participants as either convenience sampling or snowball sampling, with the addition of purposive sampling. Convenience sampling regards selecting data collection units because of availability, which is not normally preferred due to increased levels of bias; snowball sampling is selecting new instances from existing ones, which can be acceptable when done purposefully and not out of convenience; and purposive sampling is when instances are selected in a deliberate manner to have those that will yield information rich data on the topic (Yin, 2011). As described earlier, we received help in identifying potential research participants from our first interviewee, Rikard at Fatshark. However, what we were given was only contact information so that we could more easily engage and discern if they were willing to participate in the study or not. It was our choice if we would like to interview them or not. We also stated that we sought to interview employees working in various sections of the company to gain different perspectives. So, regarding sampling methods, it has been a combination of both snowball sampling and purposive sampling, since we utilized our initial contact to gain access to additional sources which could give us information from different perspectives.

3.4.1.3 Interview guide

Name	Title	Length of interview	Date & Time
Rikard Blomberg	CTO & Deputy CEO	55 minutes & 30 minutes	15-11-2018 at 10:00 & 05-12-2018 at 10:00
Harri Saari	Marketing Director	35 minutes	12-12-2018 at 15:00
Joakim Wahlström	Technical Director	50 minutes	19-12-2018 at 15:00

Table 4. List of interview subjects.

The goal with the questions asked in the interviews was to have them be primarily open-ended as to give the interviewee the possibility to freely explain their thoughts and views. As was noted after the interviews had been conducted, some of the questions were posed in a manner which may seem to be more closed rather than open, which was most likely due to inexperience in conducting interviews. Yet if a question was acknowledged or experienced as closed while asked to the interviewee, the goal was always to follow it up to seek clarification or give the interviewee the opportunity to further explain their answer. Summarizing, when uncertainties or patterns arise, is also favorable to do as to ensure understanding between the interviewers and the interviewee and to avoid having quick assumptions (Easterby-Smith et al., 2015).

3.4.1.4 Conducting interviews

One of the most important parts of conducting interviews is the need for the interviewers to be able to listen and abstain from projecting their own feelings or opinions into the situation (Easterby-Smith et al., 2015). The interviews took place both at Fatshark Studios headquarter in Stockholm, Sweden, and as well online with the help of Skype. The choice to conduct the majority of them online was reached in agreement with the interviewees, both to give them the opportunity to participate in it at a time and place of convenience for them due to busy work schedules, and as well to reduce lengthy travel times and costs

for ourselves. Before the interviews were started, we briefly reminded them of the research and its purpose, as well as gaining their informed consent to participate in the interview, the opportunity to remain anonymous, and for permission to record the interview. The interviews were done in Swedish, which is the native tongue of both the researchers and the interview participants.

3.4.2 Reflexivity

What is important to mention is concerns about reflexivity, meaning that *“your perspective unknowingly influences the interviewee’s responses, but those responses also unknowingly influence your line of inquiry”* (Yin, 2017). The following result is that the interview material become colored by the researcher’s perspective. Regardless of the length of the interviews, the reflexivity threat will always be there, and it may not be possible to overcome it entirely. We as researchers do have a laymen interest in video games, yet our knowledge regarding video game development, especially for independent ones, is rather limited. However, by notifying the reader of this interest and showing that we are aware and sensitive of the threat of reflexivity, we hope to show that we have taken it into perspective when composing and asking questions.

3.4.3 Secondary data

Secondary data is defined as *“research information that already exists in the form of publications or other electronic media, which is collected by the researcher”* (Easterby-Smith et al., 2015). For this research study, secondary data has continually been used to paint the picture of this field of research and to situate it among related studies. The highest concentration of secondary data is found within the literature review. The aim of a literature review is for researchers to *“describe, evaluate and clarify what is already known about a subject area”* (Easterby-Smith et al., 2015). The literature review is an opportunity for researchers to provide the context for the research project and clearly refine its topic.

Beginning our literature review, we set out to find and use peer-reviewed journal articles, as well as books which deals with the topics of interest for this thesis, since they are considered to be the most important sources of information for the review process ensuring that the quality and relevance of the research can be judged (Easterby-Smith et

al., 2015). Finding relevant literature has been done using online resources, i.e. online databases, such as the library network of Jönköping University, Web of Science and Google Scholar. From these resources we initially gathered articles on the topics of business models, the BMC, and their potential connection with video games, focusing primarily on articles produced from the year 2000 and onwards to establish relevance in terms of the latest knowledge on these topics. From this selection we utilized snowball sampling where we at first consulted both review and regular scientific articles on our chosen topics and traced the citations as to be able to understand the development of the academic discourse for this field (Easterby-Smith et al., 2015; Luker, 2008). From this method we discovered articles that we subjectively, in accordance with what other authors had frequently referenced to, believed to be seminal or also known as key studies (Easterby-Smith et al., 2015). These key studies enabled us to get a better understanding of the interconnectedness of the topics for this thesis and build the theoretical framework.

3.5 Data analysis

According to Easterby-Smith et al. (2015), conducting a qualitative data analysis is to *“frame data in a way that allows for systematic reduction of their complexity and facilitates the incremental development of theories about the phenomenon under research”*. What is important to distinguish is however how complexity is reduced and how theories are developed, since different approaches frames data in a way with different methods for interpreting the data (Easterby-Smith et al., 2015). Yin (2017) proposes four distinct strategies for analysing case study evidence:

1. Relying on theoretical propositions: the research questions and review of the literature stem from the original objectives and design of the case study, which is normally based on theoretical propositions. The data collection plan become shaped by the propositions and will yield analytic priorities. So, the theoretical orientation becomes a guide to the case study analysis.
2. Working your data from the “ground up”: instead of starting from any theoretical propositions, researchers can simply read their data and notice patterns which may suggest a useful concept. Any insights found can be the start of the analytic path for the study and lead to additional relationships found in the data.

3. Developing a case description: if research questions are not set initially or no useful concepts have surfaced, organizing the data according to some descriptive framework can help in starting the analysis if difficulties are found with the previous two strategies.
4. Examining plausible rival explanations: what works with the previous three methods is to define and test plausible, not all, rival explanations. Covering the rivals that appear as the most threatening to the original propositions is the goal, albeit having some leeway in deciding what is regarded as plausible.

For this case study, the aim has been to research independent video game developers through the lens of the BMC. What is best relatable from the previous stated strategies would be the second one, working on the data from the “ground up”. What Yin (2017) mentions with working on the data from the “ground up” is grounded analysis.

Conducting grounded analysis is with the aim of through a systematic analysis of the data, identify and build theory from categories that are “grounded” in the data (Charmaz, 2014; Easterby-Smith et al., 2015). Using grounded analysis allows researchers to be more open to discoveries, specifically due to it relying on understanding the meaning of data fragments in the specific contexts in which they were created (Easterby-Smith et al., 2015). Being committed to the input from research participants is thus of great importance, in combination with both cultural and historical dimensions from the data, for usage in theory building.

3.5.1 Transcribing results

Transcription of the interviews were done by listening to the recordings and typing everything down verbatim as to ensure subjectivity and to avoid our own opinions having an input on the transcribed data. The interviews were firstly transcribed in Swedish and thereafter translated into English. There is always the possibility that meanings may get lost in translation, however, to guarantee that the translation has been performed correctly the translated transcribed interview was sent to each research participant. This was done

to allow the interviewee to correct any possible misinterpretations from our perspective or make clarifications regarding any statements made.

3.5.2 Within case analysis

One aspect of coding which is important to remember is that it works well with capturing commonalities of experience across cases, yet not so well with capturing uniqueness within cases (Ayres, Kavanaugh, & Knafl, 2003). Codifying statements into fragments can potentially make the meanings difficult or impossible to identify. Ideas or insights found in the data cannot be used to interpret the data until it has been shown to be important in individual experiences, and as an idea occurs again and again in multiple contexts the idea can then start to be regarded as a theme.

So as to discover the themes across the individual contexts, i.e. the interviews, there are a few techniques available. Yin (2017) proposes two techniques; pattern matching and explanation building. Pattern matching is concerned with identifying patterns in the data, which can relate to the research questions posed, and the results can strengthen a case study's internal validity if the empirical and predicted patterns appear to be similar. Explanation building instead have the goal of analyzing the data by building an explanation about the case. In this case study, we are both analyzing the business model of an independent video game developer according to the BMC, i.e. pattern matching, and as well discerning whether it fits the current BMC by sourcing explanations from the data, i.e. explanation building.

The procedure of drawing explanations from the data is both deductive, e.g. based on propositions at the start of the case study, and inductive, e.g. based on the data from the case study (Yin, 2017). With this case study being a single-case study, the explanations drawn from the data will not necessarily be conclusive in that they can be generalized to apply to other companies, as would be easier if it were a multiple-case study. Yet, what is important to do is entertain the idea of plausible rival explanations, as mentioned previously, and show that our results do not support any rival explanations.

3.5.2.1 Codify results

Coding qualitative data is to use a short phrase or word that summarizes the meaning of a larger piece of data, e.g. a statement or a sentence (Charmaz, 2014; Saldaña, 2009). Codifying data is usually the first step for developing categories or concepts, which is also known as inductive coding (Easterby-Smith et al., 2015). Codification has been done with the aim of relating the answers received to the various segments of the BMC, as well to discern potential avenues for new information which could expand the BMC regarding video game developers. Some of the answers received to the open-ended questions had certain exploration and elaboration by the interviewee, moving into other fields of questions relating to the BMC. Therefore, codifying the questions is not a suitable option, and instead the choice of codifying the answers was made. An example for how the answers has been codified can be seen below:

(07:39) To what extent have the input and feedback from customers had on the game development and do you listen to that feedback?

*Yes, we do, and we try to absorb it as much as possible. **But it is very difficult to take in testers too early, they are instead entering after maybe half of the development process of a production.** And then you can do adjustments but not remake the entire game. **We are usually starting with testers that have certain knowledge about the product or the industry, which are a bit easier to communicate with and manage the feedback.** And then we widen the scope – we might start with inviting students who are studying game development or industry colleagues which makes it easier for us. For the testers it is easier to explain what is done and what is not.*

From this question we were primarily interested in the value proposition and in the answer, we receive information touching upon the building block key activities regarding confirming the vision of the game. What can be seen marked with **green** are sentences from an interview which have been used directly in the empirical findings and interpretation section, while sentences marked with **grey** have been rephrased.

3.6 Quality of research

Qualitative research has the essential nature of being particularistic, which makes it difficult to consider how the findings may be generalized to some broader set of conditions beyond the study in question (Yin, 2017). Understanding patterns in social life comes from studying specific situations and the people in them, while at the same time regarding explicit contextual conditions. Having properly interpreted the data, so conclusions both accurately reflects and represents the real world that was studied, will lead to a valid study. So, validity is concerned with to which extent the measures and research findings provide accurate representation of the things they are supposed to be describing (Easterby-Smith et al., 2015). Aiming for complete validity is redundant as it is not possible, however what is possible is to strengthen the case study according to a few different criteria.

3.6.1 Construct validity

Construct validity is concerned with using multiple sources of evidence and let the key informants, i.e. in this case the interviewees, review a draft of the case study report (Yin, 2017). As have been explained in section 3.4 Data Collection and onwards, there have been usage of multiple sources of evidence in this case study as to ensure converging lines of inquiry. Following an interview, a transcription was made, and corroborated with the interviewee to review that the information given had been transcribed correctly and to allow the interviewee the opportunity to redact or restate a statement. When the case study report was finalized, it was sent to the key informant, in this case Rikard Blomberg, to ensure we had not misinterpreted any statement made or information about the company itself.

3.6.2 Internal validity

With internal validity the focus is on to assure through eliminating systematic sources of potential bias that the results are true, and conclusions are direct (Easterby-Smith et al., 2015). This is done through for example pattern matching and explanation building (Yin, 2017), as described in section 3.5.2. Internal validity, for case studies is also concerned with making conclusions, e.g. every time an event cannot be directly observed a conclusion is made. Evidence from interviews and documents will act as the basis for making conclusions about events that happened in the past and led to another event and

knowing whether these conclusions are correct is difficult. This can be supported by considering rival explanations and possibilities to strengthen the conclusions.

3.6.3 External validity

External validity is regarding the generalizability of results of the focal study that has been conducted and with the applicability of the conclusion across other types of settings, times and persons (Easter-Smith et al., 2015; Yin, 2017). For case studies this is mainly concerned with analytic generalization, which may take two different forms; either through corroborating, rejecting, modifying, or advancing theoretical concepts referenced in the design of the case study, or through new concepts being found at the completion of the case study (Yin, 2017). To have in mind is that the analytic generalizations that can be made are going to be argumentative claims, and not statistical.

3.6.4 Reliability

Reliability is concerned with if similar observations can be made by other researchers, i.e. if replication can be achieved (Easterby-Smith et al., 2015; Yin, 2017). The aim of reliability is to minimize biases and errors in a study by providing documentation of the steps taken in doing the case study. However, replication of case studies are very difficult since the conditions and opportunities very rarely occur. For this case study, the documentation which could be used to attempt replication are the interviews and what answers were received to those question at that given point in time. Asking similar questions in the future may yield different answers due to evolvement of the company or other factors which may influence the outcome.

4. Empirical findings and Interpretation

In this section of the thesis we have combined the reporting of the empirical findings with our interpretation of them as to give the reader a more coherent structure, following the building blocks of the BMC.

One of the first and perhaps most crucial of our early findings regarding Fatshark and how they operate as an independent video game developer is that they appear to have two distinctive business models. They have one business model from the start of the development of the video game to the actual release of the game. Following the release of the video game, their business model evolves, and they operate with a substantially different business model.

In the first stage of development, their business model centres on the question of how to make money. The focus is on creating a good product that is attractive to customers that they will be willing to pay for. During this period, the independent game developer receives no revenue from the product they are in the process of creating. Following the release of the game, Fatshark starts receiving revenue and it is the stage during which they make money from their developed product. Their business model shifts from developing a new product to building on and supporting the existing product to capture revenue and improve the product over a longer period.

Fatshark's business model differ substantially from each other during these two stages of development and they therefore require two different BMCs in order to accurately depict their business models. We have titled these BMCs the pre-release BMC and post-release BMC.

In the following section, the first part of the developed version of the BMC, the pre-release BMC, is presented regarding the business model in the state before the release of a video game by an independent video game developer. In the pre-release BMC, some building blocks of the BMC have been renamed to better describe the business model of an independent developer before the release of a video game. Following the pre-release BMC, the second part of the developed version of the BMC, the post-release BMC, is presented regarding the business model in the state after the release of a video game by an independent video game developer.

4.1 New BMC for independent video game developers

As have been briefly described earlier, the choice to develop the BMC by Osterwalder and Pigneur (2010) and divide it into two separate canvases, is to better reflect the business model for an independent video game developer. A process suggested by Fritscher and Pigneur (2014) in order to capture and display the business model evolution using the BMC. We aim, through our following description of the pre-release business model of Fatshark, to highlight the need for separate versions of the BMC pre-release and post-release of the video game. The business model of Fatshark evolves throughout the process of developing a video game and we observe a distinct shift in the business model at the time of release of the game.

A business model's elements will change at some point. At the time of change, the overall business model will be transformed so that it is distinguishably different from its previous version (Fritscher & Pigneur, 2014). There is a drastic change in the business model at the time of release of a video game and this evolution requires a new BMC to be created that differs from the previous.

Fritscher and Pigneur (2014) outline three basic operations to transform one business model state into its next version for the BMC when a business model evolves. These actions are:

1. **Add:** adds a new element to one of the nine building blocks to the BMC. Something new that the previous business model did not utilize.
2. **Remove:** removes an existing element from one of the nine building blocks of the BMC, completely discarding something that was used before.
3. **Change:** any element that behaves differently or has one of its properties transformed.

They further suggest other mutations such as the notion of splitting one element into multiple elements, or merging multiple elements into one, but conclude that these operations can be handled with a combination of remove, add and change operations (Fritscher & Pigneur, 2014).

We have utilized these operators in order to best capture an accurate picture with the BMC of how the business model of independent video game developers are expressed at the different stages of development and the evolution from pre-release to post-release.

4.1.1 Pre-release BMC

Pre-release refers to the period of time during the development before the video game is released and through the following section, we aim to outline why this distinction is an important consideration in regard to business models for independent video game developers.

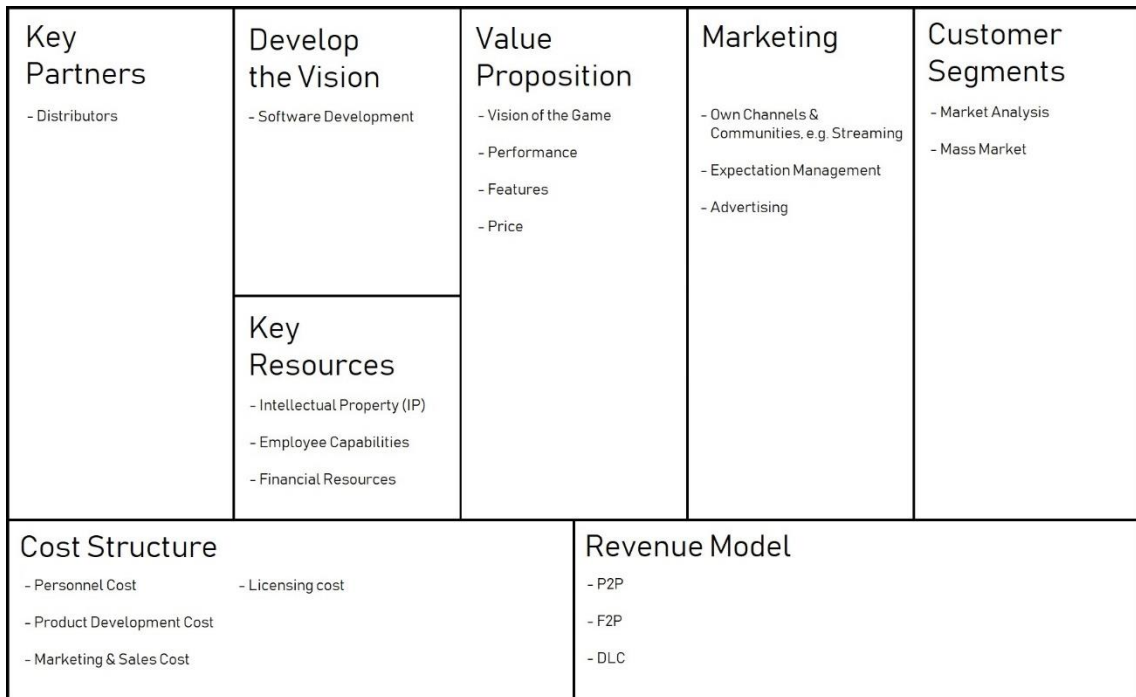


Figure 2. Pre-release BMC, adaptation of the business model canvas.

4.1.1.1 Customer Segments

The first building block of the pre-release BMC is the Customer Segments block. While Fatshark does not actively group customers in different groups with common needs, behaviors or other attributes pre-release, there is still a segmentation occurring where they spot the gap in the market. They conduct a market analysis. Rikard stated how they first saw a gap in the market for a cooperative type of game. The customers they target would be considered a mass market customer segment where they analyze a gap in the entire gaming market and subsequently target all video gamers that may be interested in that type of game.

“We believe in identifying opportunities in the market. As with Vermintide 1 we believed there was a gap in the market for cooperative games and a big demand for such games, yet none had been delivered”.

Fatshark does not conduct a customer segmentation on the entire gamer market. The reason we consider customer segments a reliable building block is that their chosen customer segmentation is a mass market segment where they conduct a market analysis on the entire video game market and develop a video game that fills the spotted gap. Market analysis and mass market should therefore be considered very important elements of this building block.

The Customer Segments is a building block where independent video game developers analyses their customer segment (mass market in the case of Fatshark) prior to the development of their game in order to better understand the market conditions as they start developing their game. This must not necessarily result in gap spotting, as in the case of Fatshark, but could be used for the developer to better understand the needs of the market in general.

This is an important element as the game is based upon what developers conceive as the need of the market. If their understanding of this building block is accurate, it increases the chances of a game's success. We consider it accurate to present this block of the pre-release BMC as customer segmentation but there should be a strong emphasis on the act of market analysis.

4.1.1.2 Value Proposition

Understanding the target customer segment before creating the value proposition is very important. This building block reflects the previous segment where Fatshark aim to create value and satisfy their identified customer segments. However, it may be difficult to apply value proposition pre-release for a video game, it is the entirety of the game as an experience that makes it worth something to the customer and identifying individual features of the game in the pre-release stage does not accurately describe the value proposition of the game. In the pre-release business model canvas, we believe there must be an emphasis on the vision of the game as an important element of the building block.

We believe that Vision of the Game is an accurate representation of how Fatshark create value for their future customers pre-release and create a good and coherent experience for

customers. The Value Proposition building block follows and build upon the previous building block, Customer Segments (market analysis). This building block describes how the company create a coherent vision of the game they want to develop.

For Fatshark, they often have multiple ideas which are floating around in the company, both among the directorate and the employees. The identification of a gap is then developed into the creation of a vision of what the game can be. The full vision of the game is often inherent in a single person or a small group, and when creating a new game, one of the biggest challenges is for those who have the vision to convey it to the rest of the group in an understandable manner. Rikard further explained:

“Something which is very important is to mark down a vision and framework for the game and then continually be able to convey that vision so that the team can relate to it and understand the game we are going to create”

4.1.1.3 Marketing

In our pre-release BMC the building blocks: Channels and Customer Relationships have been removed and, in their place, a new building block has been added: Marketing. In the pre-release stage of a video game, Fatshark does not have an individual, specific or targeted value proposition to deliver to its customer segments, as we outlined in the previous building blocks. What Fatshark does during this stage is at times communicating the vision of the game and raise awareness through marketing of different kinds.

The types of customer relationships that are being established pre-release are very narrow and one-dimensional. The pre-release relationships are solely driven by customer acquisition for the upcoming game release. We therefore find it more apt to remove the Channels and Customer relationships building blocks and instead propose adding a Marketing block for the pre-release BMC that describes how a company communicate with potential customers and deliver their vision of the game to generate interest in their product.

For Fatshark, being an independent developer, they conduct most of the marketing themselves with a focus on communicating it online through their own channels and

communities. With the majority of the marketing being conducted in favor of online instead of offline, the vast majority of the budget for marketing in terms of buying advertisement is spent pre-release. Rikard mentioned that they have several important channels they use to reach out to the customers, such as the gaming press.

Another access point which have developed greatly over the last few years is the influencer community, e.g. streaming video games. Harri mentions that influencers are a big part of their marketing, but that the focus is on building relationships with a few, not to pay them, and give them perks such as early access to new developments. Rikard adds:

“(...) another aspect is to quite early work with streamers and influencers, and in the same way you give exclusive access to the press, you try to find people that you work with and give them exclusive access.”

4.1.1.4 Revenue Model

The revenue model building block describes the revenue model of the game being developed by the independent video game publisher. In the pre-release BMC, we change the Revenue Streams building block to a new block named Revenue Model.

The revenue streams are, as to any company, an important consideration for Fatshark. Rikard states:

“It is perhaps a drawback with the games industry that you are so dependent on [the success of] your latest product. In our order of magnitude [as a company], you often work on one title at a time and a lot depends on the success of your game”.

This speaks to the development process of a video game where there is a long period of time during development where the developer is not getting any source of revenue for their work. When there are large time frames between your large sources of revenue (release of game), the success of each game is critically important. Independent video game developers are solely relying on previous revenues and assets in the pre-release stag, during development of a new game. The games being developed by Fatshark does not create any revenue streams during the development process in the pre-release stage.

The old building block Revenue Streams is therefore not applicable in the pre-release BMC and is removed.

The revenue model for an independent developer is how the company captures value from the product once it is complete. Alignment is very important; consumers need to feel they are getting value from the product, and the company need to feel they have produced something which is of value to consumers. It is important that the revenue model fits with the other sections of the pre-release BMC. There are different types of pricing options available to an independent video game developer. For Fatshark, Rikard said the choice of the how they price their games comes rather early in the development process:

“We decide rather early and we have as a goal to maintain low prices. We rather have our products be a few SEK cheaper and have customers who feel like they are getting their money’s worth rather than to squeeze out that last penny.”

It is a conscious choice to price their games low. From a short-term perspective they may be able to earn more if they priced the games higher, however it could be harmful for their reputation and brand if the value of the product is not perceived by the customer. The low pricing is also to be able to see an increase in copies sold of the base game, viewed as their premium product, and to garner a larger customer base for the DLCs.

The chosen revenue model of a game is a factor that influence all building blocks of the pre-release BMC and especially the design and vision of the game. The alignment between the game and choice of revenue model is a conscious choice on the part of Fatshark as we can see in how stated by Rikard:

“However, if we could find a F2P-model that works in our games then we could use it.”

4.1.1.5 Key Resources

The game development industry is a creative industry with a focus on human resources. Rikard explains how Fatshark require very few resources outside of their personnel to conduct business.

“That [personnel] is the most important, then we require peace and quiet, a physical studio, computers, etc. There is nothing beyond those [resources] that you could not guess”.

Without personnel, no video games can be made and with their business being software development, the personnel are the source of all value being created by Fatshark.

Financial resources could be a potential key resource for the independent video game developer. As described previously in section 1.2, resource constraints is an important challenge for independent video game developers, and this can further be supported by statements made by Rikard explaining how their improved financial situation allowed them to focus solely on their own game and their following independent success speak for how this was a key resource for Fatshark in achieving their success.

“In 2009 we started a daughter company that constructed a game engine – Bitquid, which we sold in 2014 to Autodesk and with that we managed to get financial power to focus on developing self-published games”.

This is further reinforced by Joakim:

“And we had received capital from Autodesk when we sold our game engine, so we had the possibilities as an indie company to make games properly”.

Beyond the human and financial resources, we identified one last potential key resource for independent video game developers; an intellectual property brand could potentially be a key resource, especially for less well-known independent video game developers. Both Harri and Rikard identified Warhammer as a potentially crucial factor for the success of Vermintide, especially at the pre-release stage of their first Vermintide title.

4.1.1.6 Develop the Vision

It is difficult to pinpoint only a few activities an independent video game developer do in creating a video game. Video game development is a fluid processes with numerous amounts of activities and is a continuous process where most aspects are worked on

constantly, e.g. level design, art, sound, and gameplay to only mention a few. Many, if not most, of the activities being conducted in the process of game development are crucial for the finished product. Game development do at times require a shift of focus in development as to assert and solve an unknown problem, or to finish something which have taken longer time than expected. However, in the process of this study, no specific development activity of the game development process has been outlined as more important than others.

In the pre-release BMC, Key Activities has been changed to Develop the Vision, implying that the focus is on combining and aligning resources to further develop the vision of what the video game is and will become. Considering the importance of developing the vision as a red line in the game development that ties together all parts of the act of developing the game, we find it reasonable to change Key Activities building block to Developing the Vision.

The Develop the Vision building block in the pre-release BMC describes the activities being conducted by the independent game developer in the process of transforming the vision of the game into a finished product.

In developing the vision, Fatshark pieces together the vision into an internal pitch describing the game they want to create. Time-constraints and the type of production it will be is taken into consideration, e.g. what the length of pre-production will be. Constructing the pitch and the concept was also mentioned as one of the most difficult phases, since understanding and realizing where you are in production can be deceptive.

Developing the vision of the game into a good final product that is true to their vision is important for Fatshark and being in more control over time-constraints can possibly have an impact on the quality of the output of the finished product. Pieces of developing the vision are not rushed and are instead devoted enough time until they reach a point where the company can stand behind what they have produced. One way in which Fatshark coordinate these activities is explained by Rikard:

“What is important to us is to be able to coordinate what we have and if we have everything at a certain time, and most of all try when we are working internally to create deadlines to force the production to really produce an actual product”.

When the vision of the game is confirmed within the company and the game development process has started, one thing which Fatshark does to validate their vision and check whether it is conveyable to parties outside of the company, is to conduct mock reviews. These reviewers provide an insight into how customer will respond to and receive the vision. What is very important here is to listen and consider the feedback given to realize what needs tweaking to be user-friendly, however not let it dictate the creative vision which has been set. There is a fine line between giving too little and too much consideration to the feedback, as it can create dissonance in the final product where the creative vision have been altered too much to satisfy only a small portion of the customer base.

4.1.1.7 Key Partners

As no other outside source is involved in the development and publishing of the game produced by an independent video game developer, what can be called the most important “key partners” are the distributors which are responsible for making the game available to customers on their digital platforms for purchase. These distributors are responsible for giving games access to the PC and the console market; Steam (Valve Corporation) for PC, and Xbox Games Store (Microsoft) and PlayStation Store (Sony) for consoles. For an independent developer to have their own digital platform is not feasible seen both from an economic and marketing standpoint; ease of accessibility for consumers is something which these distributors have built up and developing an independent platform, which is only available to do on PC, would greatly reduce visibility and imply spending more resources on marketing to get consumers to the created platforms. Therefore, working with the distributors on the different digital platforms removes such limitations.

Distributors aid Fatshark in a various of ways, such as setting release schedules and increasing visibility in the distributors’ channels. Due to the video game market being rather saturated in the number of games which are released continuously, some titles take up more space than others in terms of marketing. To increase exposure, Fatshark do rather early discuss with distributors which period is the most suitable for Fatshark in reaching

the best exposure for their product. The distributors are an important consideration in the business model for Fatshark that enable them to reach their customers segments with their products.

We have identified no additional key partners beyond the distributors in the case of Fatshark, we do however believe that the owners of the intellectual property that an independent video game developer may base their game upon could potentially be considered a key partner. In the case of Fatshark we found that the Warhammer franchise did not sufficiently influence the business model of Fatshark to be considered a key partner.

4.1.1.8 Cost Structure

Fatshark is a clearly value-driven company. They are less concerned with the cost implications and instead put an emphasis on value creation. Their costs are mainly from human resources as many of the traditional costs for companies that produce products are not incurred by independent video game developers. Creating and delivering value, maintaining customer relationships, and generating revenue are all activities that occur online, and the infrastructure costs are minimal.

“We are in a very creative industry where we need to continuously develop, we cannot simply continue to move along and do the same thing all the time, we must instead devote time to innovate and test things where a lot will be waste. One example is that we once every quarter have a week we call “hack week” were everyone in the company is free to do whatever they want as long as it would sometime benefit Fatshark in the long-term. It can be building new tools, test some new game engine, build a new game, build a version of our game or basically anything”.

In addition to the human resource cost that is Fatshark’s largest cost we identified an additional cost that Fatshark incur pre-release, their advertising costs. As stated by Harri:

“I would say that 90 percent of the budget for a specific release is done before the release”

As we can see by the above statement, advertising costs are mainly a cost that Fatshark incur pre-release.

In addition to the costs we have identified in the case of Fatshark, we speculate that depending on the contract stipulations between the independent video game developer and a potential owner of an intellectual property licensed by the developer, this may be an additional cost pre-release for developers.

4.1.2 Post-release BMC

In this section we will present the second part of our proposed business model canvases for independent video game developers, the post-release BMC. We find that the business model post-release for an independent video game developer differ from the pre-release BMC in substantial ways and many of the elements in the BMC evolve and change from their pre-release state.

Key Partners - Distributors	Key Activities - Software Development - Customer Development	Value Proposition - New Content, e.g. DLC & Continuous Updates - Co-Creation, e.g. Customization Through Modification	Customer Relationships - Personal Assistance - Communities - Co-Creation, e.g. Customization Through Modification	Customer Segments - Segmented, e.g. Hardcore & Casual Gamers
	Key Resources - Intellectual Property (IP) - Employee Capabilities - Financial Resources		Channels - Web Forums & Communities - Self-Driven Forum, e.g. Customers Having Problems	
Cost Structure - Personnel Cost - Product Development Cost - Sales Cost, e.g. Percentage of Sales Going to Distributors - Licensing Cost			Revenue Streams - Game Sales - DLC Sales	

Figure 3. Post-release BMC, adaptation of the business model canvas.

4.1.2.1 Customer Segments

In the post-release BMC, customer segments are more distinct as the sale of the game is commencing. From the pre-release BMC, where we argued that Fatshark conducted a market analysis (gap spotting) on a mass market segment, the post-release BMC resembles what we would consider a more traditional customer segment building block as Fatshark's business model and customer segmentation is in line with what we would expect when utilizing the BMC by Osterwalder & Pigneur (2010).

Fatshark's customers can be divided into different groups as stated by Rikard Blomberg, CTO & Deputy CEO at Fatshark:

” (...) we have tried grouping them [customers] in some different groups. Some people are those who are very passionate about Warhammer as a brand and that world; some are people who like ordinary action games; some are those who like the cooperative elements and the social aspects of the game”.

This customer segmentation can occur through different perspectives where they segment customers depending on their needs and reasons for playing the game:

“You can also group people in to a different kind of scale, which are people who just want to be entertained as if watching a movie and maybe are only playing through the game one time and experience the story. While for others it is something they will play repeatedly and ‘grind’ to unlock the next item”.

Customer Segment is a building block for Fatshark after the release of their game where they identify customers with different motivations for playing the game and therefore have different needs from the features and continued development of the game. We can see how Fatshark have not only identified different customer segments but are also actively evaluating which customer segments to pay more attention to, dedicate resources and cater towards. As stated by Joakim Wahlström (Technical Director):

“We primarily divide it into hardcore gamers... in the company there are those who are pulling the game in many different directions, but a lot of people are very concerned about the hardcore players [...]. But at the same time, we want to make the game attractive for those who only play it once, so we are considering both of those parts [...] There are different groups within the company who are pulling those different parts of the entire process”.

The customer segment building block evolves from a simple mass market gap spotting in the pre-release BMC to a more refined customer segmentation following the release of the game.

4.1.2.2 Value Proposition

The value proposition in the post-release BMC is more clearly defined because Fatshark are post-release working with more clearly defined customer segments to which they can receive feedback from and design their value proposition around. The value proposition

is a building block that Fatshark are actively considering and working with. Rikard explains how they consider developing their value proposition around the identified customer segments:

“You get a very expansive repertoire of feedback from the customers. A very difficult problem is to not solely listen to those who scream the highest, because there is often a very loud group that wants something very special. (...) On the one hand, they are our most dedicated customers, on the other hand, there may be a hundred times as many customers who see some other problem as something more important. But they will not be loud in a forum because they have not devoted as much time towards it”.

Fatshark have a live team that works with maintenance of the released game. They take the feedback and data from their customer segments and try to rank it to prioritize what they can fix until the next update and if they should do a bigger expansion as a DLC and what features customers want. Rikard further clarifies the importance of new content after the release of the game.

“I would say that the most important activities after the game is released is to offer the players more ‘content’ - it could be in the form of DLCs, expansions, free updates or temporary events”.

From these observations we can see the importance of the value proposition block of the BMC and how it is applied in the business model for Fatshark after the release of the game. The value proposition evolves from being about developing the vision, in the pre-release BMC, to be about offering new content for their identified customer segments.

4.1.2.3 Channels

Channels is a building block that describes how Fatshark communicates with their customer segments. They utilize many different channels for marketing of the game, technical support after the release of the game, gathering feedback from customers, announcing new updates and so on.

Some of these channels are driven by Fatshark themselves, e.g. customer support forums and their Discord channel, while others are external channels, e.g. the Vermintide subreddit and game press.

Fatshark's communication in these channels are customized based on the customer segment being communicated to, especially regarding marketing.

In the pre-release BMC, Marketing made up both Channels and Customer Relationships of the BMC. As mentioned in the pre-release building block of our BMC, the vast majority of the marketing budget is spent pre-release. While there is little focus on purchasing advertisement post-release, marketing is still conducted with a primary focus on conducting it through their own channels. Marketing is therefore a part of the channels building block, due to it not being done to the same extent as pre-release and there being additional channels and ways in which Fatshark communicates with their customers; it is now merely one part of the channel section. Harri comments on how the marketing change from pre-release to post-release for Fatshark:

“Then we are yet again focusing more almost exclusively on our own channels. We have Facebook ads going on almost always that are not really pushing for anything special but instead more of supporting what we communicate in our own channels”.

As we can observe, they still conduct some degree of advertising but focus more on their own channels rather than pure advertising post-release.

4.1.2.4 Customer Relationships

In the customer relationships block we can see both the importance of this block to the business model and the shift occurring from release of the game to Fatshark's post-release approach.

“Retention is very important for us as we have a large player base of over 2 million today and if we get a certain percentage of them to buy our DLCs when we release them, we are doing good”.

Harri Saari, the marketing director, goes on to further explain that they have considered new customer segments to target in the gamer market, but it is a challenging task and Fatshark are uncertain as to the upper limit of the target audience.

We can see through this both the importance of maintaining good customer relationships with a focus on retention of the players and upselling of new DLCs, as well as how the

focus since before the release of the game have shifted from the relationships focusing on selling their product. The customer relationships in post-release are motivated by customer acquisition, customer retention and upselling through their DLCs.

The relationships take many forms from technical support to utilizing communities, both those created and driven by themselves (Discord) and by external actors (Reddit), to facilitate connections between community members and help Fatshark better understand their customer segments. The building block evolves from the pre-release state where the customer relationship would be considered very one-dimensional with the sole goal of garnering interest through advertising motivated by and with a target of customer acquisition.

In post-release, there are many different types of relationships that are motivated by the factors stated above, these relationships range from more passive relationships where Fatshark support and take in feedback passively through different channels, to more actively as stated by Joakim:

“Then now we have a modding (modifying) community which is very active where we have a channel where we are talking directly with multiple modders and listen to what things they want”.

This relationship would be considered co-creation that is motivated by customer retention and upselling and is a valuable type of relationship where the customer base can actively help create value for Fatshark.

4.1.2.5 Revenue Streams

The choice of an appropriate revenue model in the pre-release BMC, is reflected in the post-release BMC where that choice is transformed into revenue streams. This is a building block that represents the cash a company generates from each customer segment.

The building block fits in the post-release BMC and is maybe more than others a block that needs to be examined and reconsidered relatively frequently by managers who desire to use the BMC in order to describe and better understand their business model. Following

the release of the game where many new copies of their premium product (the game) is sold, we expect the revenue streams to slowly shift away from sales of the game to sales of DLCs and other new content. An assumption that could be supported by Harri's description of Fatshark treating Vermintide 2 as a service and product that they want to support for many years to come:

“We do not have a firm plan that says, ‘there we are done with it’, instead we will treat Vermintide as games as a service, or we are already treating it like that. We are keeping on as we do until the next game or keep on even longer”.

This entails releasing DLCs as a source of recurring revenue to continue developing and provide further post-purchase support to the same game rather than solely focusing on continuously working on and releasing new titles.

If an independent game developer reach saturation in the market in terms of new sales, the next logical step is for their revenue streams to further shift from sales of new game copies to cultivating and upselling their existing customer base with new content.

4.1.2.6 Key Resources

In the post-release BMC, the same Key Resources can be found as in the pre-release BMC. Personnel is still the most important aspect and is used to either continue develop the vision in the form of DLCs and other content, or to supply more supporting activities for already existing customers. Ensuring that customers feel heard and that they are left satisfied after interacting with Fatshark adds to building their reputation.

Financial resources would not be considered a key resource to the same degree as during the pre-release of the game as what determines the lifespan of the game and subsequently the cost of development is to a great degree the revenue garnered through the revenues streams once the game is sold. This will be further expanded upon in the cost structure section.

4.1.2.7 Key Activities

The post-release key activities building block evolve from the single but complex task of game development and developing the vision to the post-release activities which are concerned with creating new content for the produced games such as DLCs or temporary events, as mentioned in previous sections. The key activities for Fatshark post-release are mainly continuing production activities with a smaller focus on customer support and marketing to help maintain and improve relations with existing customer segments.

The development activity and maintaining customer satisfaction post-release can see a clear evolution within the post-release building block from the time of release to later stages of post-release. Joakim states:

“There are test studios who have several hundreds of players who only search for bugs, however that is in no comparison when you get 100 000 people at the same time to play it, then you find things which you may not be able to yourself find which may only happen once in a million attempt. So, then we get endless lists of bugs after release, so it is a lot of focus on fixing the bugs which comes from having a lot of people playing the game and test every aspect of it”.

In the initial period post-release, bug fixing is an important key activity. Gradually the development focus evolves from bug fixing to developing new content for the customers post-release.

4.1.2.8 Key Partners

For the post-release BMC, key partners is a building block that is similar to the pre-release key partners building block. After the game has been finished and made available to consumers, distributors will continue post-release to provide the possibility for the game to be purchased.

The distributors are an important consideration in the business model for Fatshark in order to reach their customers segments with their products.

4.1.2.9 Cost Structure

The costs in the post-release BMC change from a mainly personnel and some advertising costs to almost exclusively personnel costs because, as previously mentioned, the vast majority of the advertising budget is spent pre-release. The post-release cost structure is similar to the pre-release stage and it is a value-driven cost structure.

What is important regarding the cost structure in the post-release BMC is that it is compatible with the other building blocks and especially the revenue streams. As highlighted by Rikard:

“Then we have a larger tail in DLCs, but I would say they are revenues to continue maintaining the game”.

The cost structure evolves from a more static cost in pre-release to form a more dynamic relationship with the Revenue Streams building block of the BMC. We can here see that the cost structure is directly influenced by the revenue streams and the compatibility of building blocks is an important consideration for companies. Without sufficient revenue streams, the cost structure, and subsequently personnel that work on and support the game, needs to be reduced in order to balance the finances. The continued development therefore hinges on a balance between the cost structure post-release and the revenue streams.

5. Conclusion

In this case study, the purpose has been to use business model framework in order to better understand how independent video game developers develop their business models. The aim has been to contribute to the development of business model literature within the context of independent video game development by further the understanding of how a business model framework can be utilized in this new context.

The BMC by Osterwalder and Pigneur (2010) was utilized in order to describe the business model of the case company, Fatshark Studios. Here, areas of where the BMC could be applied and shortcomings of the BMC for an independent video game developer were showcased. We then further developed the BMC by proposing to divide the BMC for independent video game developers into a pre-release and post-release BMC to better reflect the evolution of the business model of independent video game development. In these new BMCs, changes to various sections were made to more accurately describe the steps and considerations taken in developing a business model for an independent developer.

With this research, we have aimed to generate a further understanding of how independent video game developers work with their business models to create and capture value, and we have further developed the BMC to better describe the business model for an independent video game developer.

6. Discussion

In this section we will discuss some of our findings and give our view on some aspects we believe should be touched upon to give a comprehensive perspective of this case study.

Some of the sections for all three versions of the BMC utilizes findings which may be argued to belong in another section, e.g. what have been used in Value Proposition may also be used in the Key Activity block. We have to the best of our ability argued for why a finding have been chosen to be used in a specific section, and it has been chosen regarding what have been stated by Osterwalder and Pigneur (2010) about the various building blocks of the BMC and with our own selective judgment of the empirical findings. The different sections are however not meant to be separate entities with no relation, rather the different building blocks are based upon and influence the entirety of the business model. They together describe the business model of a company. For example, it appears that, to some degree, a causal relationship exists between the revenue streams and cost structure building blocks in the post-release BMC, where depending on the source of revenue streams, Fatshark have made a conscious decision on the cost structure in how much to support and subsequently spend on maintaining the game.

While we have studied and argued for which elements to be included in the BMC for independent video game developers, we have not investigated the relative importance of the different building blocks. Our intuitions are that Customer Segments, Value Proposition and Revenue Model/Revenue Streams are among the most important elements for the business model development of an independent video game developer, but further empirical research needs to be conducted on this topic. A study like the one conducted by Fritscher and Pigneur (2014) will need to be done to draw conclusions regarding the relative importance of the various building blocks in the context of independent video game developers.

Through our interviews we have learned how the business model of a game developer can change drastically when transitioning from developing in association with a publisher to becoming an independent video game developer. We believe that elements of our BMC need to be further adapted if used for non-independent video game developers. However,

we do also believe that if the BMC is applied to and studied for non-independent video game developers, the context of study for some of the building blocks need to be customized in order to accurately capture their business model. For example, the customer segment building block need to be studied through the context and with focus on the final consumer (gamers) rather than their actual customers, the publishers. Given our previous argument, there may be more similarities and overlap of our pre-release BMC and post-release BMC, and how the BMC would look when adapted and studied for non-independent video game developers than initially assumed. It is important to realise that the process of evolution of the business model for non-independent video game developers may not necessarily follow the same pattern of evolution as in our case study of an independent video game developer.

We believe future research using a BMC with the context of video game development should further examine the pre-release to post-release evolution as it appears to be a very relevant context for independent video game developers, explaining, to some degree, the differences in business model for developers in the various stages of their development lifecycle. There may exist similarities of the pre-release/post-release division within video game development to industries with long development cycles that becomes service-centric after purchase of the product and it is something that we believe may be valuable to further study.

Our thesis has been focused around a single case study and this method can be viewed as showing a very narrow representation of how business models are for independent video game developers, i.e. that the sample size is rather small. Despite this fact, we believe we have been able to present rich data in terms of volume and quality which aids to shed new light on this theoretical domain. To further increase understanding and show any potential nuances of the business model evolution for independent video game developers would have been to gather a larger sample size, both in terms of more companies in similar situations and interview subjects.

A limitation of this thesis is that the perspective of it is on Sweden since the case company is operating in said country. This notion is important to remember from a theoretical standpoint since there may appear differences between countries if the same research was

to be done focusing on a company or companies from countries dissimilar to Sweden. There may exist cultural aspects, or other aspects which may influence the business models, which are difficult to ascertain if they are not compared with companies from other countries. Considering the nature of video game development with an entirely international market focus, we do not believe this to be a strong influence however, but further studies need to be conducted to confirm this notion.

Another limitation is regarding the quality of the primary data. As mentioned previously, the small sample size, both in terms of number of companies and interview subjects, can possibly lend doubt to any conclusions made in this thesis. However, multiple sources have been used which all have different areas of responsibility within the case company, which we would argue showcases narratives from differing perspectives giving a fuller picture of the business model and its evolution. Although the sources of evidence are in the same form, i.e. primary data gathered from interviews, they are multiple and coherent in that what one interviewee stated can be supported by statements made by another interviewee. So, there exist converging lines of inquiry in the data we have gathered and presented in this thesis, lending strengths to its findings.

7. Reference list

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8. Appendices

8.1 Appendix 1 – Interview transcript 1

Studio:	Fatshark Studios AB
Interview location:	Stockholm, Rosenlundsgatan 29C
Interview form:	Face-to-face
Date/Time:	15-11-2018 / 10:00
Interviewee:	Rikard Blomberg (CTO & Deputy CEO)
Interviewers:	Erik Almér & Gustav Eriksson
Length (Recorded):	54 minutes

(01:00) Could you give us a short description of Fatshark Studios – what has the development looked like?

Fatshark has been in existence for approximately 10 years and we have gone through several phases. Simplified you can say that we worked as consultants and producer's in the beginning, partly to consult in maintenance of games that takes part of a project or production. After a while we had the capability to take and do entire productions commissioned by publishers. However, somewhere the end-goal has been to do games entirely ourselves, which we develop and publish, and that is something we have done as time, capacity, and financial power has been available. This has then been cycled with commissions from publishers or consulting.

(02:25) Do you still perform commissions from publishers?

No, since 2014 we have sort of phased it out. In 2009 we started a daughter company that constructed a game engine – Bitquid, which we sold in 2014 to Autodesk and with that we managed to get financial power to focus on developing self-published games. So as of 2014 we have entirely been working with our own game titles.

(03:16) So you are only developing your own games now?

Yes, now we are only working with our self-published and self-financed games. We are also looking into publishing and to help smaller indie studios as publishers or collaborative partners.

(03:42) How does the general process look like when you are developing a game – from the birthing of an idea to when you publish the game?

Oftentimes there are multiple ideas which are floating around, and what is actually triggering an idea becoming a game project is us as a company having the capacity to do it. When we are done with something old and employees become freed from old projects, they need something new to work on, the process is triggered by this necessity for us to “work on something new”. Then there is often a small catalog of ideas floating around among the directorate. We are trying regularly to collect ideas from the entire company, but it is often ideas floating around among the directorate. Then these ideas are iterated upon and we establish an internal pitch that describes the game we want to create. Depending on the time constraints and what kind of production it is, we have some form of pre-production, which can be either woefully short or longer, it is different from case to case. In many cases we have had a game which is built upon a previous game, as with Vermintide 2 which is built upon Vermintide 1 and so on. So, there it has been a very natural extension of a previous project. Then we can also produce a pitch for what the new game shall be, however you can also shorten some of the production aspects because of having knowledge from the previous game to proceed from. Instead of prototyping we can iterate on what we already have. Then when a development process is started it will successively increase in speed. If we take Vermintide as an example, around 8-10 people were working with it initially, while during its biggest point, we had upwards of 50 people working with it.

(06:20) How large capacity do you have in terms of personnel?

Currently we are around 80 people, but there are approximately 10-15 people that is not directly involved with production, which are instead working with administration, marketing, IT and so on.

(06:32) With sourcing your ideas from the early stages of game development, are you looking at the market and seeing what type of games your customers are interested in?

Naturally we do such an analysis at an earlier stage. However, maybe we are not doing any larger kind of scientific research as in taking in data, instead we believe in identifying opportunities in the market. As with Vermintide 1 we believed there was a gap in the

market for cooperative games and a big demand for such games, yet none had been delivered.

(07:39) To what extent have the input and feedback from customers had on the game development and do you listen to that feedback?

Yes, we do, and we try to absorb it as much as possible. But it is very difficult to take in testers too early, they are instead entering after maybe half of the development process of a production. And then you can do adjustments but not remake the entire game. We are usually starting with testers that have certain knowledge about the product or the industry, which are a bit easier to communicate with and manage the feedback. And then we widen the scope – we might start with inviting students who are studying game development or industry colleagues which makes it easier for us. For the testers it is easier to explain what is done and what is not.

(09:25) We assume it is a pretty big difference in how you are working now in comparison to when you were tasked with work from other publishers. Is there a big difference in the idea generation process?

Often when you receive a commission from a publisher, you get a rather coarse outline of what they want to achieve, and to sell yourself as a supplier you take this rough outline of an idea and ask yourself “what would we do with this?”. The publisher may have sent their idea to 3-5 other studios and received more detailed design version from all these companies together with maybe an outline of the time requirements and costs and so on. Then it turns into a bid, but with more creative feedback. The publishers are also able to exploit this and take this creative feedback and use it when they are deciding what to do. But there are a lot of problems with working with the classical type of publishers and especially with the vision of what a game should be. Oftentimes the vision of the game is inherent in a person or a group of people, and what we often experienced was that the publishers we worked with had a rather large employee turnover. So, the person who had the vision of the game initially were often not working at the publisher anymore when you started the production of the game.

(11:35) Is there also a big difference working alone than with a publisher during the development process of a game unlike with the idea development process?

We experience that we can be a bit more flexible, which has its benefits and drawbacks with self-published games. We can control the release date more and if we feel like we need to devote more time to a game, then we can do that. Working with publishers this understanding was often not there and there was a longer road to the market. We may have been directly working with the publisher's production department, and then they had a marketing department planning when the game is supposed to be released. So, there were multiple lines of communication, and they had in many cases already booked in when the game was to be released, while the people working with the development may have realized that it was not a good idea. But all of these lines of communication could generate a whole lot of miscommunication. The benefits of having an external publisher is that you receive clear demands – you know what to deliver and it is always more difficult to make demands internally in an organization.

(12:57) Except for when you are working independently, which external partners do you work with that are important to you when you are developing a game? When you were developing Vermintide you utilized the game engine which you sold earlier. That was an actor who maybe was important, however now Autodesk stopped developing the game engine, so it is we who have the right of ownership to it and can continue developing it, so there it is not so important. I would say that the most important partners are the distributors we are using and that is primarily Steam, Microsoft, and Sony who are distributing our games on the digital platforms, where Steam is the most important for us.

(13:55) Why is Steam the most important platform?

Because that is where we are selling the largest bulk of our games.

(14:00) Is it because of the large userbase?

Yes, they have a gigantic userbase, a very large portion of the PC market, and they have segments which we are targeting. Now this is starting to change a little with that many publishers and developers are starting to create their own digital portal which becomes competitors, but Steam is still the undisputed champion. Then we have other actors that are important, such as marketing channels like Twitch, but that is not something we are

working directly towards. There is some communication to Twitch, or Amazon who owns Twitch as a company, but also to all the communities which exist.

(15:04) Concerning marketing, is it something you are doing more yourself or do you outsource it to other companies?

Yes, we do most of the marketing ourselves and have around 5 people who are working with it. Sometimes we enlist independent agencies which helps us in specific regions where they have better contacts, but most of the work we do ourselves.

(15:50) How do you view the gaming market according to different customer segments – do you do any sort of segmentation or grouping of customers?

There are a bunch of different ways to do these kinds of segmentations and so far we have not actively been working with conducting any such segmentations. But if we look at the players who are playing our games, for example Vermintide, we have tried grouping them in some different groups. Some people are those who are very passionate about Warhammer as a brand and that world; some are people who like ordinary action games; some are those who like the cooperative elements and the social aspects of the game. Those are some of the big groups. You can also group people in to a different kind of scale, which are people who just want to be entertained as if watching a movie and maybe are only playing through the game one time and experience the story. While for others it is something they will play repeatedly and “grind” to unlock the next item, and for them it is a different kind of experience.

(17:54) So it is mostly in your own games that you are seeing various segmentations?

Yes, because we are not exhaustively looking at the entire market because that could be any type of gamer. We will only do one type of game, and we may perhaps change the direction of what type of game we do, but we will not do anything like a football or racing game.

(18:28) Do you have different ways for reaching these different types of customer segments or is it the same channels despite the type of customer?

Well, there are some various ways there. Now I am not currently working with the marketing, but we are doing some advertising even though it is not effective for the types

of segments we are targeting, but we do it anyway. We can for example say that we want to advertise to people who enjoy Warhammer as an IP or want to advertise to those who plays this type of action games. Then we can also be active in online communities or try to be seen in places where these types of groups are active.

(19:33) Do you get different types of feedback from the different customer segments, for example that some would want more story?

Yes, absolutely. You get a very expansive repertoire of feedback from the customers. A very difficult problem is to not solely listen to those who scream the highest, because there is often a very loud group that wants something very special. However, oftentimes I would say they are not representative for the entire group of players because it may be that this small group of players are the ones who play thousands of hours and thinks that the item they get when they are level 100 is not satisfactory enough. On the one hand, they are our most dedicated customers, on the other hand, there may be a hundred times as many customers who see some other problem as something more important. But they will not be loud in a forum because they have not devoted as much time towards it.

(20:36) How do you use that feedback that you receive from the different segments?

We are collecting that feedback and try to rank it. We have people that work with the communities as their only task and that are collecting the feedback. Now with released products we have a live team who works with maintenance of the released game. That is something we use, with the help of our community managers who take that data and try to prioritize what we can fix until the next update and consider if we should do a bigger expansion as a DLC, or what people want to see.

(21:13) How has working with the released game changed from when you received commissions from publishers?

That is perhaps the biggest change. Often there were some post-production on an assignment, and oftentimes it was very difficult to establish business-like prerequisites where you had one-way incentives to work with a released game. It was difficult to establish a framework where both partners were able to continue to earn revenues on the deal. It is good that you mention it, because it is maybe one of the most important reasons for why we had problems working with publishers. For example, we worked a lot with

Paradox early, and in many situations, it worked well, but to find a way after the game is released and keep building on that was very difficult. In some way you must get a mutual idea of what it is that creates extra revenues after having released the game and who has the right to those revenues. Also, how much we as developers should put in and how we are supposed to measure what the effects of that are on the revenues. While when we release a game that we published, we can make those decisions ourselves and get a feeling of what is right to do. Otherwise every update would be an agreement of what we should do in that situation.

(23:25) With previous projects, how were funds secured for them? Was it through any microtransactions or DLC?

We do not have microtransactions, we are instead selling some skins through DLC. The line is a bit murky between microtransactions and DLC, yet we do not have any story driven DLC but instead cosmetics items that we sell. The difference with DLC is very small, but eventually we are moving towards that direction. The major part of our revenues still comes from sales of the base game, which is our premium product. Then we have a larger tail in DLCs, but I would say they are revenues to continue maintaining the game, while the large profit is in the sale of the premium product.

(24:58) Was it approximately the same models from when you work with publishers that the biggest revenues came from the sale of the game?

I think it was, because then we did not receive revenues from the game but instead as developers you are often paid according to reaching different milestones in the production of the game. Then there was also a royalty side to the game if it were to sell well, but that was something developers very rarely got to see because of so many if's and but's.

(25:33) So it was most often a sum which you negotiated early and then nothing extra?

Yes, there existed an upside, but for it to kick in the game is often supposed to be a world success and that is not very realistic.

(25:55) What differences are you noticing when financing projects now? Are there currently more continuous revenues from a project which you use to finance the

next project? Was it the same when you were working with publishers that you received funds from them to start a project?

Then you received funds continuously. I would say often at that point in time that there were very bad margins and the eventual margins we had with the projects most of the times ate up the gaps until the next project started. This often put you in a bad position to get a new project which did not make you a better negotiator to raise the margins on the next project. So, it was very difficult to become profitable. Now I think if we were to take a publisher project, we would have much better possibilities, because now we have released two successes and we are coveted developers and could get much better margins. But when you were a smaller and unknown developer it was much more difficult.

(27:22) That is not something which you have an interest to do now that you have a better reputation, to take a project from a publisher?

It would be if it is an industry partner that wants to and have something we think is really cool and would take us to the next level as a company. If a big publisher or industry partner comes and say, “we want you to do this big flagship”, well yes, we can think about it. However, it must be something we see to be developing for the company to do.

(28:09) During the development of a game, are there any moments that you notice that you end up stuck on or something that is difficult during the development of a game?

Oftentimes it is that pitch and the concept phase when you try to decide on what to do which is kind of difficult, I would say. Then when you reach being able to almost release the game and tying all the pieces together. Often you find yourself thinking you have completed 90 percent and realize that you have only completed maybe half.

(29:00) Is it something you recognize in every game you have developed?

It may have been varied a bit and that is due to the complexity in the product and how many similarities it has with earlier products. One can see a tendency that you reach a point where you feel that “now a large portion of the time has passed, and we feel that we should be finished”, but then realize you have a lot of work left. But there also usually exist a point which can take half the project that you feel “now we have no idea where we are”. However, when you want to puzzle everything together and feel that the game

is playable were you have the feeling that “now we suddenly have accomplished something”. It goes in cycles during the development process you could say where you are in expectations and so on.

(30:39) Is there something you have done to improve not finding yourself in certain cycles and make the work more continuous and effective?

What is important to us is to be able to coordinate what we have and if we have everything at a certain time, and most of all try when we are working internally to create deadlines to force the production to really produce an actual product. Because it is very easy that parts of the production feel that their work is done, but what is needed to make everything click is not there. If a demand for delivery does not exist, then there does not exist a demand that everything is going to work together. So, we are often creating artificial delivery demands such as we are talking with beta testers or alpha testers which we bring in and let them try the game. We may say “next week there will come people to try the game, and we must ensure that they can try the game in a reasonable way” and in that way coordinate. Later during development, we are often doing mock reviews, where we have people who often work as journalists who writes a review of the version of the game they receive. This is something we do in rounds and take that feedback, but it is also a deadline “now we must send the game out for review, now the pieces most stick together”. To find points where you in some way can determine how far you have come is very important for us. Then obviously we try to have a project plan and determine how much is left in it and there you can see some form of progress and how much of the planned work we have completed. The big risks are often that which may have been missed in the planning and therefore the more concrete deliveries have become the best way to coordinate.

(33:03) How do you decide when a game is finished and ready? Is it a feeling or do you have any special requirements?

Most of the times we have a goal for when the game is supposed to be finished, but we continuously adapt to where we are in the development. We have told ourselves that it is more important that the game is well-made than that we release it on time, and we have as an internal goal to reach 80 as a score for the game on Metacritic, because we do not want to release a game which will not reach that score. It can be difficult for us to measure

something like that, but we can have an eye on it with for example our mock reviews and what score we get there. Mostly it is a point of no return when we announce a release date and in that regard we have moved towards doing it later and later; partly to not commit ourselves to a specific date, partly because it is difficult to continue with marketing over a longer period of time from that you have announced the release date to when you are releasing the game. That is a tendency which we are seeing for the entire industry that you are holding back your release dates, and then it becomes a little game during release periods because you need to be able to find a period where it perhaps is not so many competing games that are released and block the view of your game.

(34:42) For how long you decide to work with a game after release, e.g. with updates and bug fixes?

We have as a goal to work with the games if they are profitable, or it does not exactly have to be profitable, it is also important for us towards our community to work with it. Then it can also be a question about how much resources we spend on it. And, a bit concerning what other products we are working with. Now we have basically stopped working with Vermintide 1, but that is because we are working on Vermintide 2. I think that if we would have made an entirely different game, we would still have some people working on Vermintide 1, but when we do a sequel it feels more natural to move on to the next game. No, we have not set a specific limit, but I believe it would be difficult to not have any type of profitability during a longer period. But we would probably not just cancel it directly but instead scale it down.

(36:01) Compared to your competitors, what is your view on the pricing of your own games? Is it something you decide upon early during development or something which is decided as things are completed?

We decide rather early and we have as a goal to maintain low prices. We rather have our products be a few SEK cheaper and have customers who feel like they are getting their moneys worth rather than to squeeze out that last penny. In a short-term perspective, maybe we would earn more money having a higher price, however in the long-term we think it would harm our reputation and brand because you would feel you did not get as much value for the product. We have priced our games around \$30, but for our next

product maybe we will go to \$40 or similar, but I do not believe we will do something drastically and raise our price to \$70 as some competitors are pricing their products.

(37:00) Are you weighing in the price of your DLCs in the original price of the game?

Yes, we sort of are if you have a lower cost of the base game you will sell more copies and have a larger customer base for your DLCs and so on. So, there is of course a thought with that.

(37:35) During the development process, do you have a focus on keeping down costs and reducing waste, or more to explore and do what you think is best?

We of course want to explore as much as possible and do so to some extent, but the problem for us is that even if we have the financial capacity, we do not have the organizational or resource capacity to do everything we want to accomplish. Even if we would recruit 50 additional people, we would not be able to take care of them and introduce them to our organization and the processes quickly enough. We are instead growing slowly and organically in the way we can do, but to us there are innumerable projects that we can choose to do where everyone has a positive net present value, but we cannot choose to do every single one. We are of course not trying to waste resources, but on the other hand we are in a very creative industry where we need to continuously develop, we cannot simply continue to move along and do the same thing all the time, we must instead devote time to innovate and test things where a lot will be waste. One example is that we once every quarter have a week we call “hack week” where everyone in the company is free to do whatever they want as long as it would sometime benefit Fatshark in the long-term. It can be building new tools, test some new game engine, build a new game, build a version of our game or basically anything. You can say that stuff like that is waste, but to us it is an investment because many ideas originate from it.

(40:46) As you mentioned, you are trying to grow organically – how has the success with Vermintide affected you financially? We assume it has brought some financial stability, but have you tried to have some fast growth or just take it step by step?

Yes, a bit quicker. We purchased a studio here a couple of weeks ago, a bit to increase our capacity. They were nine people and we have as well been recruiting more aggressively. We are discovering it is more difficult to take bigger leaps, we must also be able to find a process where we are growing in a suitable pace that is not too quick or too

slow. A lot of it are practical problems, for example that we cannot fit more people and to just change work space is not something you complete overnight. So, it is often the more practical problems which stops you. Or it could be that a certain group needs to recruit more but it can be difficult to do when the boss is on parental leave for example.

(42:12) Also with Vermintide, what are the biggest differences in the process with developing a sequel to a game than an entirely new one? Are there differences in how you approach it?

There are some differences. You can iterate some things quicker when you have a basis to go from, absolutely. Then there are always things you want to change anyway. I would say the biggest difference is that you do not have that initial worry what the game is which you may have, and it is easier to explain to everyone at the company what it is what we do with a sequel – “we are going to redo and change these things from the first game”. When you create a new game, the biggest challenge is often for the person who has the vision of the game to convey it, so everyone understands what we are going to do, which is way more difficult with a new product. It can be until half of the development or longer until people get an aha-moment about what we are doing.

(43:38) How many projects are you working on simultaneously? Is it one at a time or is it when a game is finished that some people transition to the next one?

We are currently doing so that we have one in production and then we have one live which we are maintaining. It is a wrap-around of sorts when you are looking at how many resources are put in to them, that those who are working with the game will be moved over to a new production but not everyone. Then it may be in the future that we are starting development with new games even earlier, so we may end up with three simultaneous developments parallel, but we are not there yet.

(44:27) When it comes to making an attractive game, how do you decide what it should be? Do you use your own expertise and decide, or do you take in feedback and ideas from consumers?

Yeah, it's a question we have talked about a lot. We did a project with Vinnova and a couple other companies where we looked exactly at customer driven game development as the project was called. We tried inviting customers who sat and discussed games and

it was interesting but very difficult and abstract. I would say that from the start you have a lot to go on from what you have done previously, even if it does not mean that you are not copying someone else. But to see that a concept works in another game or does not work, it is often when you sit down and reason around an idea that you look at how different concepts work in other products. Then you have put together a group of concepts yourself and think about how it will work together, but then you can take separate parts of these concepts and see how they worked in another game, or how they did not work.

(46:19) Do you feel that there is any risk of getting stuck in developing the same kind of game now that you have produced two successful titles?

Yes, and that is kind of the idea. We will probably not develop games which are completely different from what we have made. Because we have built up an expertise and we are good at it. Then we of course want to innovate, but we want to innovate iteratively – we want to switch out a few components at a time and not start over from scratch, but instead take what is good and redo things one at a time and try new things. It could be a new setting, or instead of being cooperative it is competitive, or instead of Vermintide having very linear maps we do very open maps while the gameplay stays the same. We are thinking that with every product, we are remaking some things, however not everything.

(47:36) Is it something that is also true for DLCs and how you earn money from the games when you try new things, or do you have a clear image of it?

Well, it is kind of the same there too. We do not want to remake too much. One of the components can be the payment model – if we would change the payment model then maybe we change it and some other stuff, but not everything at the same time.

(48:04) Do you have the same payment model on games you develop or are there other kinds? Because these days F2P models have become very popular for a whole range of games.

Well, it is kind of the various payment models that exist. We do not yet have any bigger expertise on F2P so that is why we have not done it. It is not impossible that we do not do it in the future, but there are also very big differences regarding markets, for example

the Asian market is much more popular for F2P than the Western where there still exists space for the premium products. But we can also see that it is evening out that the premium products are getting much more space in the Asian market. We sold for example a lot of copies of Vermintide 2 in China. I believe that all the markets are about to become internationalized, that all the segments will be visible in all markets. Then it can be the opposite if you are looking at it in monetary terms, then F2P is very big, but for us we can sell a couple 100.000 copies of Vermintide 2 in China which is good, especially when you know that everyone who purchased it there did it through VPN.

(49:42) How has the mobile market affected you in how you develop games, or have you seen something in the mobile market you can apply to your games?

A lot of F2P comes from the mobile market, but the thing you do not want to take from it is for example many of these F2P games are essentially not driven by the game itself but by the payment model and then you apply the game. It is about finding a payment model where you are triggering the reward mechanism with people in a very short and repetitive gaming loop. It does not match our games at all, however there are a lot of interesting aspects in having a F2P-model, but we would never base our games on it. However, if we could find a F2P-model that works in our games then we could use it. That is also something I think you are starting to see now especially maybe with PC games that they can have a F2P-model that works rather differently, as for example with Fortnite being the most recognizable. They have a F2P-model that is very different with the ones you see with classical mobile games. They also have a different customer base, while with mobile games where you have a large audience who is not paying anything and then a few whales who are paying everything, compared to Fortnite which have a much smoother distribution in how people are paying.

(51:42) So you are seeing a rather distinct difference between PC/Console- and classic mobile markets?

Yes, and maybe depending on game type. You have created a game which is entertaining and then you applied a payment model, instead of building a game around a payment model. But when it comes to mobile phones, we do not have any ideas to enter that market. We did some tests when it was booming seven to eight years ago, but we felt we were not good at it, and there is supposed to be smaller teams who are good at it. We are too big and

too used to the PC/Console production which is very different, and we could potentially think about doing a collaboration with some mobile developer to do products which are based on our games, but we will not create mobile games ourselves.

8.2 Appendix 2 – Interview transcript 2

Studio: Fatshark Studios AB
Interview location: Skype
Interview form: Voice-call
Date/Time: 05-12-2018 / 10:00
Interviewee: Rikard Blomberg (CTO & Deputy CEO)
Interviewers: Erik Almér & Gustav Eriksson
Length (Recorded): 30 minutes

(02:45) Why do you decide to view and have as a goal to use Metacritic to get a rating on your games?

It is no fantastic rating system in any way, but it is the best one that exist simply put. There are not so many other aggregates compilations of what people think. There are some other measures we view, maybe the most important one is Steam user reviews.

(03:21) Do you put any special thought to which reviews you value the most since you are viewing user reviews from Steam, since there are many variations of them, ranging from long to short and serious or having a joking tonality?

We are viewing the aggregated, there is a measure there of how many that are positive. And then we are aware that it varies over time, so you have to take it with a grain of salt. But for example, we are working internally with raising that number with the improvements we are making. There we have an internal goal that it is somewhat of an objective measure of what the community thinks of the games and what they are reacting to. We can see that when we are making improvements that the community likes then that number will rise, so that is some type of measurement. Steam user reviews also have that you can see all time and recent, so you can see if something have changed compared to earlier for example. Something which you have to consider is that some other activities also have an effect too, but that is something that you learn bit by bit. For example, when we have a very aggressive sale, free weekend or giveaway where we give away the game for free, it tends to affect user reviews negatively.

(05:00) Is it then more people playing that are not as dedicated?

Yes, if you try to make some conclusion of it, it will be very anecdotal. But it is people who have not invested into the game, which are only trying it because they are receiving it for free or very cheap have a greater tendency to rate it negatively. So, we are also viewing that number but still with some care because we need to weigh in other activities that we now have an effect.

(05:40) You are using mock review to get some indication of how the game development is going, is it something you use more before to see how customers will receive the game?

It is focus groups we are taking in with different backgrounds who gets to try the game. Sometimes it is just designers who stand behind them when they play and observe how they play. Sometimes it is followed up with questionnaires who they fill in. but there you also have to consider which person they are and what background they have. I think it is more difficult for them to say where we are in terms of ratings, instead it is more for finding single features or problems that many people are struggling with that affects the overall quality.

(07:00) Do you take in different people so that it is not the same people who see Vermintide 1 and Vermintide 2?

Yes, I would say both. Partly we have taken in a lot of people who have played Vermintide 1 when we were developing Vermintide 2 to see their reactions and what they think is good. And partly we have taken in people who have not played the first one. But there are some different things to look at – the ones who may have already played a lot of the first one, they often have rather clear opinion of what they want to see and there you may get some more detailed feedback. While the people who have not played at all, there it can be more to see if they understand what they are supposed to do or if there are features which are very difficult for beginners to take in.

(08:04) Is there some difference when you do original titles in comparison to Vermintide 2 with mock reviews and test groups?

We have not come so far in a development of that kind that I can directly say how it is. But I would generally say that we want to work more with that. We do not want to let it

dictate the development entirely. If you would only build the development around focus groups, we have the fear that it would turn into a very bland product – something that everyone likes a little bit. We need to have some form of creative vision which we cannot change too much just by listening to user feedback. So, it is a tough balancing act.

(09:11) You started developing Vermintide because you saw that there was a need for such a game in the market. Do you have any notion specifically of why customers find Vermintide better than other similar games?

I would say that there are rather high production values and that it is a rather polished product. We do as well have a strong IP, so we can build a world and background that have some type of meaning, something which is not simply taken from thin air. But I would also say that most of it is built on good craftsmanship.

(10:20) How much would you say Warhammer as an IP in the success of the games?

Primarily to increase the visibility of the games, but also in the long-term to further build on to the world and get content. It is hard to put a number on it, but maybe around 40 percent.

(10:58) You mentioned the last time that you did not work primarily with marketing, but how do you generally reach out to customers with new updates or a new game? Are there some specific things you do?

There is a number of channels that are important to reach the customers, partly we have the gaming press I mentioned, and it is important to build a relationship with them. So, when we have something new to present, we know where to go and what magazines who can pick it up and get articles around it. And gladly some more penetrating and deep articles around it and invite the press to test it in an early stage. They have to create content so for them it is important to maybe get exclusive content and come to our offices and play, and maybe get exclusive screenshots or videos and get a hands-on experience they can write about. They have to fill columns in their papers and they can write about what is around if they come and visit us in the studio that they can write about how we work and which people they meet and anecdotes and so on. You have to expand what you present so that you can create interesting content for the press. That is a part of it. Another aspect is to quite early work with streamers and influencers, and in the same way you

give exclusive access to the press, you try to find people that you work with and give them exclusive access.

(13:07) Do you weigh printed media differently in comparison to moving media, because games being displayed best in moving media and how you experience it?

Yes and no, I think we put pretty much effort into both. They may fill some different functions. I believe that now to the large number of players it is videos and streaming which is the big medium. You can do groundwork in printed media, because maybe not all gamers are reading what is written in magazines, but the ones who work in the field will read. So, you can do some pre-work that will cause more streamers and influencers becoming interested by being seen in printed media. If you get a cover on a big magazine or a spread, then you are in some way considered as a serious game, a large title that most people will look at. That is some kind of stamp of quality. I do not disregard the sense of quality by those who stream or make videos and so on, but there are viewing it more broadly and can pick up anything. Then it is nothing that tell how much it will be streamed, so you make groundwork in by being seen in printed media.

(15:14) You also mentioned last time that you are working with Sony, Microsoft and Steam as distributors. Would you be able to shortly describe those relations and how you are working with them?

It is a bit sensitive, a lot there can go under non-disclosure agreements how you are working with them. It can be stuff like release planning, that you discuss when it is a good date for release and what kind of activities, we can see from the distributors side – can the help us be more visible in their channels around a certain point in time and a lot of those types of discussions. A lot of titles are being released so if you want exposure then you may have to discuss a time which is appropriate where they have place to market the title.

(16:26) Do they have any input on the games in general or do you give them a finished game and say that you want to have it published?

Historically they had and made input, but today that has moved to them not giving so much input on specific titles. That you reach a certain quality and maybe questions around pricing and such. But if you go back seven to ten years, then they were very scrupulous

in reviewing every title and come with feedback. I think the amount of titles have made that you do not have the time and leave it to the developers. It may also be that we have built our brand as a company and that we are trusted in greater extent.

(17:45) Is it the same for all three channels?

Yes, Steam does not really have the same quality approval, instead the highest approvals of quality comes from the consoles where you have to go through a rather strict certification. There it is mostly about areas such as technical, stability and in certain aspects rating related things, not so much about the content in the game. Of course, it is about the content, but not so much about specific features, but if you go back a few years as I mentioned we would get feedback like “would it not be cool if you had that feature too?”, but that we do not see so much of today.

(18:47) Would you be able to give a general picture of what the costs are within the company?

Personal is the absolute biggest cost. Now we are releasing a game where we are licensing the IP, so those licensing costs are rather large but that I cannot go more into detail on. But it is not fixed cost in that way, but more a marginal of the product. If you view the fixed costs for production, then personal costs are stand for at least 70 percent I would say. More if you consider consultants and outsourcing.

(19:50) Is the licensing cost based on the final sold product?

There are different models, but in many cases if you are licensing an IP you will either pay a large sum upfront or you pay, as for us which are independent developers more common, a percentage of the earnings.

(20:23) What would you say are the most important things you need to complete your development in terms of resources? Is there something special you need except for the personnel?

No, not really. That is the most important, then we require peace and quiet, a physical studio, computers, etc. There is nothing beyond those that you could not guess. One position which is added in periods before the release of a game which is important is

testing and there you often hire external companies which are specialized in testing and final testing. And also, localization and translation to the languages you support.

(21:36) So those tests are different from inhouse quality assurance?

Yes.

(21:47) Is it because to get a different perspective on the game and go through it again? What are the major differences?

It is more to get higher capacity during a period to often a lower cost than it would be inhouse, because this is mostly done in countries which have a lower pay aspect than Sweden. Not in all cases, but in many. And then it is people, especially when it comes to consoles, that has as their main task to test for consoles and the specific problems that are needed to go through to get certification for consoles, to test all the testcases you know that the platform owners will demand. So, it is a specific expertise that is difficult to maintain inhouse. If we release a game once a year or every other year, we are not in the same testing fazes all the time, while these people are testing games around the same type of problems and test cases and who have the equipment to do all the testing that needs to be done.

(23:05) Which activities within the company do you view as the most important for you to be able to do what you are doing with game development? Are there some special key moments which you feel are very important?

That is a really difficult question for me, but I would say something which is very important is to mark down a vision and framework for the game and then continually be able to convey that vision so that the team can relate to it and understand the game we are going to create. That is the most important I would say.

(26:20) How does the aspect of the game industry being so dependent on the last title affect you at Fatshark?

It is perhaps a drawback with the games industry that you are so dependent on your latest product. In our order of magnitude, you often work on one title at a time and a lot depends on the success of your game

(26:58) Does it become a bit of “everything or nothing” due to all the costs involved?

Yes, exactly. That is an area that the industry needs to innovate itself on. Or that you will see mergers and acquisitions so that you can split the risks between titles, alternatively to have a revenue model that is a bit softer around the edges. That is a bit what is going on with games as a service, but it does not fit all games. Then you cannot shoehorn it into everything as well. Something I also believe is that which we have some ideas on and we are seeing many starting to look at is different types of subscription models which are similar to Netflix. But it may not have stuck just yet because of exactly how everything is supposed to work for independent developers. For example, have EA that EA Access and the premium version where you are receiving basically all their games for around 1000 SEK a year. And as I see it now, it is a model which only works well for bigger publishers which can produce all those titles inhouse and then have a subscription model. It is more difficult for smaller developers even if there was a platform where we would be able to sell the games through a subscription model, it would be very difficult to divide the revenues in a fair way.

(28:10) What would you say are some of the important things you do after release of a game?

I would say that the most important activities after the game is released is to offer the players more “content” - it could be in the form of DLCs, expansions, free updates or temporary events.

8.3 Appendix 3 – Interview transcript 3

Studio:	Fatshark Studios AB
Interview location:	Skype
Interview form:	Voice-call
Date/Time:	12-12-2018 / 15:00
Interviewee:	Harri Saari (Marketing Director)
Interviewers:	Erik Almér & Gustav Eriksson
Length (Recorded):	30 minutes

(00:57) Could you describe your role at Fatshark in short and what you do on a daily basis?

I'm the marketing director at Fatshark and that marketing department consists today of eight people with different roles, it is content, trailer, director, community management, graphical design to name some. It is rather mixed, however on a daily basis it is mostly about coordinate and basically make sure that people do their job. If we look at my tasks, or areas of responsibility, it is to keep our game Vermintide 2 alive. It was about eight to nine months since the release and we have released content every now and then. We did for example release new content the day before yesterday. Then it is my job to make sure that this content we release reach as many people as possible and so that we keep our current fanbase satisfied, if you look at content versus price and so on. Then also to make sure that all our marketing keeps going, both in our own channels and in our paid channels, and in our communities so they are up to date and happy. Gaming communities are a bit special, they are very vocal you could say, and very passionate. If you do something wrong, you will hear about it.

(02:59) How would you say that you are working with marketing before the release of a game? Because we can notice there are some differences in that process before and after the release of a game.

We have tried some different things, but if to take the latest (DLC) we have put a lot of effort into our own channels and communities, because we have seen it is there we are having the biggest penetration. We have a rather large community, we have good private channels, we have for example a rather big Twitch channel that is pretty active, and we feel that as long as we are there and are visible so that people feel that they are up to date

and know what we are doing we are selling quite well. But we are of course purchasing some advertising and for us Facebook worked out really well despite that it is a rather casual target audience there, we have really decent results for our advertising. So that we have been running quite a lot. We are going to begin with YouTube-advertising too, and then we have also purchased advertising on bigger gaming sites. But you feel that often these bigger gaming sites have written about our game anyway, so we have reduced those purchases, because it feels like they are not needed. We have pretty good PR-work due to the game having a rather good reputation and journalists are also keen to write about it, which is rewarding. Going forward I would like to focus more on community and our own channels and streaming and influencers. We will never pay influencers, influencers are of course a very big part of our marketing, however we are instead interested in building relations with a select few and give them perks or early access to patches and stuff like that, rather than paying them money.

(05:12) When did you start at Fatshark and was it before the first Vermintide game got so big?

No, I started two months before the release of the second one.

(05:28) We were thinking about what changes were visible before the release of Vermintide 1. Before that release Fatshark were not really well-known.

No, exactly. I believe the brand Warhammer helped a lot with the first game, but the times were a bit different back then. It is three years ago rather exactly and I know that the influencer community was completely different three years ago. It was much easier to get people to play the games and get exposure from there. We were in contact with several of the bigger ones and they were gladly playing our games. Today if we go to them and ask if they want to play our games, they want half a million SEK to play it. So, it is very different today, I know that the influencer part help a lot for the first game I have heard.

(06:24) If to look after the game has been released, how does the marketing change?

Then we are yet again focusing more almost exclusively on our own channels. We have Facebook ads going on almost always that are not really pushing for anything special but instead more of supporting what we communicate in our own channels. If we talk about some new function or something alike, then our ads are rather supporting what we are

talking about rather than trying to say, “buy now”. Even if we do those “buy now” ads of course, I would say that 90 percent of the budget for a specific release is done before the release, because it is oftentimes more purchased channels before a release. Afterwards it is more support.

(07:29) So it is more of a focus to maintain the customer base and less focus on reaching new customers? Or is it sort of similar?

Yes, exactly. Retention is very important for us as we have a very big player base of over 2 million today and if we can get a certain percentage of them to purchase our DLCs when we release them, we are doing good. Naturally we have looked at new customer segments, but it is rather difficult. Then we have started to speculate how big the customer base is, in terms of what the maximum number is. Because it is a rather niched game in one way – it is a co-op game which is quite easy access, but a lot of people I assume, because it is Warhammer, that you need to know Warhammer [to play it]. However, that is not true. I’m no super fan of Warhammer before I started here, I have instead learned and realized that you do not need to know anything about Warhammer to still think the game is very fun. The brand Warhammer both helps and impedes [us] from growing.

(08:45) If to take the DLC release as an example, how did you proceed in advertise it?

This DLC release have a bit of an experiment, we have barely purchased any advertising at all. Instead we have almost exclusively been doing it in our own channels and then it has sold faster than our last DLC which we invested quite a lot in advertising. I think partly because we learned quite a bit about some mistakes, we made with our first DLC which was a bit of expectation management where we talked a lot about what is to come and then people did not think it was worth the money because we released some things for free. One thing we are experimenting a lot with in this release is exactly expectation management that we tease a bit at a time, we are not revealing everything before it is released and that in itself have caused people to talk a lot about it and then it has spread that way a bit. Then it is also maps from Vermintide 1 which we have released and that has also in itself had a pretty big penetration in Vermintide 1 communities and everyone who owns that game. So, it has gone quite well despite us not purchasing a lot of advertising.

(10:15) Do you have any private run communities when it comes to customer support and so on, or is it Reedit and the alike through which you are reaching out?

We have an official support forum, but it is mostly for pure support tickets for people who have problems with crashes and so on. When it comes to having a community we are maintaining, we are browsing around a lot on Reedit and it has been there we are and answer, even though it is not official. It is definitely the most popular place to be. We are putting a lot of effort into Discord actually and are trying to get that channel to grow because it is an official channel. We have an official Fatshark Discord where we announce things and help people with things and we are trying to become more active. The last few weeks we have tried directing it a bit more. Going forward we will put a lot of effort on Discord.

(11:22) How are you leading the customers to your Discord channel?

It is above all through mentioning that we exist on Discord in other channels. We have realized that it is most often only hardcore fans who find their way there in the end and not everyone have Discord either. Discord is not huge yet, and common man does not have Discord at home. It is easier for people to just go to Reedit and talk than run Discord. A lot of people go in and Google “Vermintide forum” or something and reaches Reedit.

(12:05) How do you work with the various customer segments and how are you receiving feedback? How are you viewing marketing and the different groups, such as hardcore and casual gamers?

I do not really know. It feels like they are buying the game and only playing it through once or play a bit with friends now and then, they are not really heard in the channels we are browsing. Maybe if they have an issue, but then they are finding their way to our forum. The ones that are heard are those who have just bought the game of course, but as well those who have played hundreds of hours already, those are the ones who are heard the absolute most. So, I would not say that we are working differently towards casuals versus hardcore gamers, it is not a conscious strategy if it were to be.

(13:34) Is it the same for when you are marketing new features and so?

In the marketing we are trying to direct ourselves to a wider customer segment I would say. Sometimes we add some inside jokes from the game I certain parts of marketing, but

it depends on which channels. In our own channels we can do these inside jokes. But are we purchasing media, for example in a magazine or do advertising in Xbox or PlayStation store, it is definitely towards the wider target audience. We cannot assume they know anything about the game.

(14:26) Do you have any various partnerships in different regions that you are working with?

We have hired PR bureaus in other countries because of us having difficulties reaching out. For example, in Russia we have a very big target audience, so it is almost impossible for us to reach out because they want things in Russian and there are some special channels. They do not use Facebook in the same way, they have VK which is their Facebook. We have taken external help sometimes to reach certain countries.

(15:32) Is it case-by-case basis or do you have any others which you are constantly working with and how important are those?

We have a PR bureau which we are working with constantly. They help us in the U.S. for example, it is such a big market, so it is difficult to reach out to if you do not know how.

(16:00) How would you say that you are communicating the value of the game, what is it that makes Vermintide unique, special and worth to play?

We are really pushing hard on that it is a co-op action game in the Warhammer world, but above all that it is a co-op action game and that it is similar to Left for Dead. Often it is other magazines that says things, for example there was one magazine which said that it [Vermintide] was “the best co-op since Left for Dead”. Of course, we are using that because Left for Dead is so big that if we make a comparison to it or use a quote someone have said, people will start to become aware of the game. But otherwise we push very hard on that it is co-op.

(17:11) Would you say that it is approximately the same strategy that you have within your own channels and when trying to reach out to a bigger customer base through more official channels?

Yes, I would say that. I would not say that there is any bigger difference.

(17:49) Do you have different strategies for when it comes to different platforms, PC, Xbox and PlayStation?

Yes, we do. We are going to release to PS4 in less than a week, on Tuesday, so there we have followed PlayStation, or Sony's, recommendations a lot. They have a bit more mature audience and that it is more casual. So, there we have tried adapting our communication to not being so nerdy and maybe display the game from its best side, that it is instead cool rather than showing a lot of action which we have in other trailers for example. The trailer for PS4, which is not yet released, instead of focusing on gameplay or action it is more cinematic you could say. So, with PlayStation we have been very aware of that it is a bit different. On Xbox we have been running about the same as on PC, and we have followed Microsoft's recommendations there, and it is also rather nerdy. We have had the nerdiest communication with PC players of course, Xbox is a bit more casual, and PlayStation is a further step towards casual.

(19:30) Do you in general work a lot with Microsoft and Sony?

Yes, we have a rather good relation to both and get support from them at release of new things. It is often social media and blog posts where they post our trailer and such things.

(19:57) Is it the same when you are communication with Valve through Steam?

Yes, we have contact with Valve as well. They help us push out things, but it is a bit different on their platform because you cannot purchase space there in the same way. It is a lot more algorithmically built and campaigns. On Xbox and PlayStation, you can actually purchase space in the store and that is something we have done. On Steam it is even more important with the relation with them, to come up with things which you can do together which are mutually benefitting.

(20:38) Is there made any special marketing to Steams various campaigns, such as Summer Sale and so on?

We are participating in those sales obviously and then we try to do other fun activities around that, but Valve does not help us with that in any way. I believe we are too small, because there are many other bigger games which are anteceding, I'm assuming at least.

(21:20) When it comes to support and maintenance of Vermintide 2 after you have released it, how long do you decide that you are going to work with it? Is it until the next title, or something more specific?

We are planning to keep maintaining Vermintide for many years ahead. We do not have a firm plan that says, “there we are done with it”, instead we will treat Vermintide as games as a service, or we are already treating it like that. We are keeping on as we do until the next game or keep on even longer. We are still supporting Vermintide 1 even though the second one is out, not so many patches or content are being released, but we are not considering that game as dead. It is instead still an alive game and so. And when it comes to Vermintide 2, it still has as I said many years left before we even start to consider stopping supporting it.

(22:30) What would you say are the most important activities you are doing for Vermintide 2 now to keep customers happy?

It is new content. They like cosmetics, it is rather popular in all games right now. We are quite poor at doing cosmetics, but we have a few things such as portrait frames which are very easy to do and publish. However, we do not want to overexaggerate because then they are not so special. Our community is difficult to please, they do in general like cosmetics and balance changes and new weapons and so on. So that changes the entire game when we release a new weapon.

(23:35) When you are taking in feedback from customers, is it approximately the same as when you are pushing out new information through Discord or Reddit, how do you collect the information?

We all are browsing Reddit a lot and our forums, even everyone in our company do and not only support staff. A lot is picked up by lurking around in different channels. We are always in discussion internally about things people have picked up or noticed that people are talking about. But a lot is also coming in through the support forum, where people are sending in suggestions they want to see in the game or what they consider bad and good, and what we can think about. Then we cannot just receive everything, it is a lot of factors which are part of what we can do in the game. I would say we are really good in browsing around and collect information.

(24:56) How do you then decide which part of the information that you are going to further work with?

We are listening to Reddit, but we can never let them dictate what we release or do. Instead, we have our own release plan on what we want to do when. So, a lot of the feedback we listen to, and often it is quality of life features which we can act upon, so not the game itself. We cannot release ten maps or weapons just because people want it. It is a lot of work that goes into something like that. But it is a lot of quality of life things we can act upon and which we have acted upon.

(25:56) Do you have any offline marketing in terms of more traditional marketing, for example in magazines or is everything these days online?

I would say that almost everything is online, we have not purchased anything outside of online. It would be if we succeed with PR, because we have appeared in quite a lot of magazines. But otherwise there are some small things we have done together with Games Workshop who owns Warhammer, such as flyers in different fairs. Fairs are a kind of offline marketing which we are browsing and hand-out codes, flyers, merchandise, and sometimes when we are releasing something big, we have a booth too. We had a booth for Vermintide 2 in some different fairs earlier this year, so that is what I would count as offline marketing for us.

(27:02) What type of fairs is it then?

We have been to almost all of the bigger fairs now without exhibiting, so we have been around and marketed anyways and talked with influencers and such. Latest it was DreamHack Atlanta and DreamHack Winter, then all the PAX (West and East), EGX (Birmingham and London), GDC is as well a big fair.

(27:46) How does the marketing proceed at the fairs? Are you trying to create word of mouth for example?

Yes, if we have a booth which takes care of itself pretty well, then we are mostly standing and selling in the game. If we do not have a booth then it is mostly about walking around and showing yourself, you put on the Fatshark t-shirt and then walk around shaking hands and talk to partners. Then it can be with hardware, we have had some partnerships with

Intel, Alienware, Corsair, and Razer. It is mostly relation building for future partnerships and collaborations I would say.

(28:33) What is the goal of those partnerships? Is it that if you purchase something from, for example Intel, you get a copy of the game?

We have had before that if you bought an Intel processor you received the game and the same with Razer, where we are also going to do a thing. Xbox have recently received mouse and keyboard support, so we are there and have implemented Razer Chroma support in our game and then Razer are going to help us push our game in CES as an example and show the Razer-support in our game. Then we are in their booth and show ourselves. So, it are those types of partnerships that you are trying to find that is beneficial for both and often we are allowed in their booth and display our product.

(29:36) You mentioned earlier that PlayStation have a more mature audience. When you are creating the marketing are you pushing it to have it more in video form or release screenshots as teasers for example? What are you working the most with?

We want to work the most with video and trailers, or trailers are mostly before release or bigger releases, but we want to work more with small video clips and that is something we will go in for. The problem thus far is that we have not had any resources for it. Video is something I really want to focus on and streaming. When it comes to screenshots then it feels more that it is supporting material.

(30:36) When do you guys in the marketing department take part of the game that is being created? When do you start to release teasers for example? It may potentially be a bit different now that you have already developed the game, but if to see it from a pre-release perspective.

Yes, we are quite involved since we are not such a big company. I am involved almost everywhere and have decent knowledge of what is going on. We have made the mistake sometimes were we have teased or announced too early without a definitive release date and it have ended up delayed. That is very annoying because everything becomes wrong and everyone end up disgruntled. However, lately I have been rather adamant in that we need an absolute date that everyone is comfortable with before I start pushing out teasers and so on.

(31:41) So it is not that you just announce the date, but instead that teasers need to be released when you have a clearer picture of when the game is about to be released?

Yes, I feel that it is rather scary with roadmaps and final dates. A lot is very quick at us and nothing is done until it is done. So, marketing is slipping behind at times because it can be that nothing is completed until the next day where it is completed. So, we have maybe a week or day to do something with it and there you just have to do the best of the situation. We have generally quite difficult in planning six months ahead. I have a plan for what I want to do and when I want to release what, but because it is game development it is rather difficult knowing where we are in three months because all of a sudden something may appear which means putting all resources to try and fix that thing and then everything is delayed a few weeks. However, there is an overarching plan definitely.

(33:00) Despite planning as you mentioned now that is difficult with game development, what would you say more that is difficult that you are encountering in marketing?

That is community relations, I think. Being transparent to the community because you want to be open with communication and answer their questions, but sometimes we cannot because we cannot just reveal things or promise things due to us not knowing whether it will happen or not. So, I think the most difficult is keeping the community satisfied, because oftentimes it is not possible to answer some things.

8.4 Appendix 4 – Interview transcript 4

Studio:	Fatshark Studios AB
Interview location:	Skype
Interview form:	Voice-call
Date/Time:	19-12-2018 / 15:00
Interviewee:	Joakim Wahlström (Technical Director)
Interviewers:	Erik Almér & Gustav Eriksson
Length (Recorded):	50 minutes

(02:00) What is your experience from the video game industry?

Me, Martin, Rikard and two other guys started our own business in 2002, in reality we were sitting in a basement and started making video games. It was a game development competition in KTH that was called Game Awards I believe, which is called Swedish Game Awards now. And then the idea was that we were only going to make a game and try to find a publisher in six months, and we ended up sitting almost two years without pay. Then we became consultants and worked at a company called Grin and made two games there; Ghost Recon: Advanced Warfighter 1 and 2, and that was finished around 2006. Then we started working on new games with them, while we at the same time hired some consultants with our consultant pay that we had and let them sit in our basement place and keep working on our game. Then we did some more games at Grin as consultants, one of them being Terminator Salvation in 2008. Then in the spring of 2009 Grin went bankrupt due to the bad economic situation in society. And then we had started Fatshark a year before to make games as consultants for Grin. So, we managed to survive even though they owed us a lot of money, and we released a wild west game on a lot of assets we received from Grin which we released in 2010 called Lead and Gold. After that we were a bit pinched, so then I started working for DICE as a consultant and worked with Battlefield Play4Free for two years, and there were ten other people from Fatshark who did the same. So, half the studio was staying and working on a puzzle game called Hamilton's Great Adventure. I am a programmer at my core, so I have been working as the Lead Programmer on several of these projects. Then during this time, when Grin went bankrupt, all these developers were spread to different companies. We are good friends with those who worked as game engine coders and we could talk with them a lot beforehand, so we came to an agreement to start a company where they could build a

game engine and they sat inhouse at our place. So, they built a game engine which we in 2014 sold to Autodesk for a lot of money and we took that money to develop Vermintide, the game which was our first big hit in 2015. Between them we do some contract games for Paradox which are called War of the Worlds and War of the Vikings. Then up until now, I was Lead Programmer on Vermintide 1 and now I am Technical Director for Vermintide 2 and coming projects.

(06:05) What does the role of Technical Director mean?

It can be a bit abstruse, but it can be that I am in charge of keeping an eye on the more overarching architecture when we are building a game and I examine code that other people write and give suggestions on how to make it better. Then I also sit in on a lot of technical meetings and such. Fatshark have a rather flat organization so we are a lot of mixed types of people here; when we start up a new game we come with input on the design from a technical or economical perspective, or in every other way possible.

(06:52) Do you also have some input on, for example, the marketing the company does?

Yes, we discuss those things even if I am not the person who will make the final choice regarding that. But I would say a large part of the company have input on a large part of these things and there are many discussions going back and forth as for example if we are going to do something F2P or chose that business model or if we are going to open a shop to sell skins or not, so all those things.

(07:35) How does the general game development process look like from that you conceive an idea to that the game is released, and you keep developing it?

In short you can say that it depends on if you have capital or not as a company. We have capital now, so we have a lot of freedom in what we do. We are our own publisher, so we publish our own games. Normally you are facing if you are having an own idea you need to get capital to finance that idea, which means getting a hold of venture capital or a publisher who are willing to put capital into that idea. Or you have to go to a publisher and make one of their ideas instead and they pay you, but then you normally do not really have an upside to it. So, the process when you have received a contract or decide to do a certain game, it usually start with having a concept or prototype phase. So in the absolute

beginning, we have a concept artist and a game director and a bunch of designers who together exchange ideas in the company and arrives at an idea; or we already have an idea and an IP that the game world can be situated in, or we do not even have an idea and then we need to figure out what it is you are going to do. So, there is a lot of meetings where you only spew out ideas and test them, and a lot of it is about drawing concept art and decide “where is this? Is it supposed to be a futuristic world or a fantasy world and what are the consequences from that?”. And then you also decide if it is supposed to be an open world or if it is a corridor shooter and all of that have consequences in later stages. So, for example now we started a new project, and, in that project, we have had design and art do a lot of concept paintings, however we have not yet decided on exactly if it is supposed to be an open world or if it is supposed to be more linear. So, therefore we have put up a small prototype team who sit and test and build small parts of it to see how it would feel. When that part is finished, you start the actual project for real and it starts to ramp up with a small number of people. In the games I have partaken in making, it has maybe started with one or two programmers, maybe an animator and a graphical artist, some people who do modelling, five people or something like that. It can be more on the art side, but they do not need to sit with the team, they can instead be sitting and doing houses or something, but then you start with some form of ground structure and start to build up different systems for the game. So, you do not want to start ramping up with more developers until you have a ground to stand on, because then they will sit and have nothing to do, it basically creates a lot of inefficiency. But after that ground structure is in place you start to slowly ramp up with more and more people. We have had some different teams, at most we had seven. When we were working on Vermintide 1 and started that, we started the project with only three to four people who sat with it for some months and then we became more people and grew to 10, 20, 30, and 40 people. During that start, we had seven parallel projects, seven different game projects.

(12:00) How did you decide to choose and develop exactly Vermintide? What made you decide that it was the game you wanted to continue with?

It has been a dream for a lot of people at Fatshark, because there are many that have had Warhammer as a hobby when they grew up and painted the figures who are fighting. And our Art Director have won a lot of competitions painting these figures and as well worked as a professional painter, so it was mostly him who was pulling this Warhammer thing

and as well Martin who is our CEO have been doing it a lot as well, but he was perhaps not as good. But why it just became Vermintide... I played an extreme amount of Left for Dead, so I talked with Martin and he came with the suggestion that we could do a first-person Warhammer game because that has not been done in that way before. And we had done a lot of games, we had made Lead and Gold who was five versus five and with co-op and AI. And when we worked at Grin a bunch of years earlier, we had made four-player co-op against a lot of enemies, so we knew that part really well and how you write such games and we had that experience. So, we felt that we were a bit sprawling before we did just Vermintide and that we need to focus on what we know and not to a kid's game and then do a top-down game and go back and forth between those. So, what happened was that Anders De Geer who is our Art Director called Games Workshop's reception and asked if we could make a game and they directed him to someone who said we could maybe do that. Then we started negotiating about royalties and such for all their IPs. But the strange thing with the game was that it became just a four-player co-op Warhammer game as Left for Dead, which is a bit funny because no one had the idea initially. Normally you associate Warhammer with complex strategy games. But there was obviously a market for our game.

(14:35) When it comes to the release of a game, how to you decide when the game is finished? Do you have some measuring points that you are using?

What we have had multiple times... normally I would say a lot of game studios are suffering from that they are getting work from contracts and they have a certain time that is always so short to make a game. We did several of those games where we only had one year to make it, and you cannot make a good game in a year unless it is a very simple game. In one year, you are able to build all the systems and the game, but then you need almost another year to polish it to become really fun and not be so full of bugs. That was what we knew when we decided to do Vermintide, we did not want to do a semi-finished project, we would instead invest as much as we could into it. And we had received capital from Autodesk when we sold our game engine, so we had the possibilities as an indie company to make games properly. So, during our development, during the first year we had a bunch of goals with the game how we wanted it to be, because even though we copied a lot from Left for Dead, we still wanted to be separated from it. We did not only want it to be a shooter, but also have melee, that you could fight in close combat and that

was very important for us, but that alone took a year to really nail and make it feel good. Before we had got the melee to work there was nothing to release, and it did not feel good and it was quite a bad game. Then we also had persistency in the game, that you are leveling characters in comparison to Left for Dead which also took quite some time to add. But I would say that when we are playing in the company, we were playing internally during a one year period and it was not perfect or super fun, but when we finally got that first melee hit to work and you could hit a club in the head of an enemy and it felt like that was what you wanted to do for the rest of the day, we knew we had found a core mechanic in the game that was so good that whatever else we did this game would sell. So, then you start to tie everything together and it starts to assemble something, but it took until nine months more before we released it. But it depends, because if you do have the money you have the luxury to push a little ahead all the time, however you are also increasing the risk with the company continuously. We could have continued longer with Vermintide 1 for example, but we chose as a company to not risk anymore by pushing it as we did.

(17:45) Before that development phase, which moments would you say are the most important from the idea phase to the completed game? What is the most difficult and important to get right?

I would say the most important thing to get right is the core mechanic or a core loop in the game which is fun. Because a lot of games are depending on having a design which say, “up until here it will be fun, we just have to get all the rest to work, then it will be fun”, and you have that way of working. You do not know if things are fun until you have it, so you can sit and develop for years and when you have added all the elements it shows that it is not fun, what do you do then? Then you have to remake everything. So, it is an iterative process, you redo things and test stuff all the time until you nail everything. I think that is the most important thing.

(19:08) How do you know that something is fun in a game? Is it something which is decided upon internally as when you find a core process, or do you take in feedback from customers?

It is both. It is very difficult to be self-critical because you love your own baby. You have a lot of times made the mistake to think that something is fun subjectively, but that is

because you yourself is so invested in it that you often maybe cannot see it with clear eyes. So, we are running game testing everyday throughout the entire company, after lunch everyone in the company usually sit and play one hour, or at least half of the company, a lot of people have tasks they are forced to do. So, then you have continual testing, and then it is usually feedback based on how people think the product is. Then when you have a game that is so polished that you can take in external testers, because during the first year a game is not fun to play because there are so many bugs and glitches and crashing all the time, and things are half-made, there is no HUD, or the menus are half-done. Then, often when you have games with persistency and when you are building a character it can come in quite late, so you have to play with the same weapon and character all the time. Then when you begin to tie in those things, so you internally think it is fun, we usually invite groups and people, firstly friends and family, then students and every possible person gets to come and play, you get new feedback on what they think. And then we receive a lot of feedback on things you maybe did not consider directly, partly because you are blind from working on it so much, because you have become used to those little silly things you have been doing all along. Then after that we usually hire journalists and have them write a mock up review of the game, or several. Then we pay them to basically do an interview, but that review will never be released in a magazine simply because it is a mock up. Then they will write for example “if you fix these things the game will receive this score in my review and then it will most likely end up on Metacritic with a score of eight out of ten”.

(22:10) How does the game development change before the game is released to how you are now working with the game being released and develop it?

The first half for a programmer is that you build a system that other people, designers, will use to fill the game world with things. Art will build maps with houses, terrain and trees and all the small objects that the animators sits and do animations in, the characters that have been in motion capture, we just fill everything that shall exist in the world. Then you reach a level where we feel you have to close off expanding and polish what we already have, then you go in to a process where you only fix bugs, because before that you have only created technological debt and artistic debt, and most of all the game will not have good performance to be able to be run on a lower performing PC or console maybe. So, then there is an optimizing phase in the end, it is always the last phase I would

say because it entails going through all the content, so the entire art team sits together with Technical Artists, those are the ones that measure and views things to assure they are correctly built, they are something between programmers and artists. And me as a programmer will sit and look at what different systems will cost to run, and then you have to go in and optimize everything, and then you find a colossal number of strange things you need to fix to for example raise the frame rate and reach these goals. The very last time before release, optimization will happen up until the day of release, then you also fix a lot of bugs, crash bugs or glitches, and then you can have a thousand of them and you try to reduce them, you set different goals and try to reduce them below certain levels, for example that 1 in a 1000 players can crash. But that also depends, you can have too many things on your plate and then the manager might want to add another system in the end which will not end up so well because there are a lot of bugs still left, so then you may end up with even more technological debt after release as well. So, after release, because the game has not been played by so many people before release, maybe only 30 people in the company has played it and we may hire a test studio to play it, which is also something we do. There are test studios who have several hundreds of players who only search for bugs, however that is in no comparison when you get 100 000 people at the same time to play it, then you find things which you may not be able to yourself find which may only happen once in a million attempts. So, then we get endless lists of bugs after release, so it is a lot of focus on fixing the bugs which comes from having a lot of people playing the game and test every aspect of it. Then you also get a lot of bugs on different configurations of computers, as for example at the start up they cannot start the game. And when it comes to PC, people can build almost endless variants of PCs with different components, so these combinations we try to discover and understand what it is that happen for different players. Because it is connected to which tools you receive from the players, so we set up a portal where players can send in their tickets and then we try to fix it. And initially we tend to fail, we are trying to add a DLC and have it released at the same time, then it has to be done before release which can be difficult to achieve if you are at the same time stressed over achieving a game which have to be good at release. As it were with Vermintide 2, we had a goal of releasing a DLC a month after release of the game, but we did not achieve that because of all the technical debt in the form of bugs from the main game so we had to push everything forward. We tend to work on releases

on PC first, then Xbox, and then PlayStation, because it is too much work and we are too thinly spread to solve all bugs and problems at the same time across platforms.

(27:22) How do you decide after release of a game if you are going to polish the current content or work on creating new content in the form of DLCs? What has the priority?

That is somewhat of a tricky process with people at the company having different wills. Now, finally I should say, a few months ago we built a live team as we call it who are responsible to maintain the game and add new things continually, because in the future there will be things added all the time as new skins, puzzles, and all kinds of things. And then we also have planned, far back in time there are planned DLCs, primarily consisting of maps where map teams are sitting and working on. But it can also be other things that are part of the DLCs. As games work now, the more you release the bigger the community gets, so our strategy is to after release try to release more and more things, because after each release you sell quite a lot more games and then you can reach a higher level of concurrent players. So, before that number of players start to drop, you can get it to rise and it is there we are trying to go, that is always our goal. Then if you are going to make completely new things, we have tested a bit back and forth, we have mixed it up a bit, as for example making new enemies, maps, or new events and all of those things. What we are trying to do as a company on the whole is to try and go towards a procedural way and reuse assets we already have because it is cheaper for us and the most expensive thing for us is content, to make maps and so on. It cost a whole lot and the players find it fun, but during a very short time. It is better to do things which can be sustained in itself in some way, as mutations of the game where you combine different pieces of a puzzle and work on that.

(30:18) With feedback from customers, how is that combined in this process where you decide on what you should do?

They are actually quite involved, we follow a lot of social media. We read everything on Reddit, and in the different Steam forums, at least the big forums who write about our game. As soon as there pops up a thread where people are complaining or something, that information we often get to use in patching the game. It can be that they complain about us needing to fix some weapon, or there are also suggestions on that. We now released a DLC with three old maps from Vermintide 1 and we thought we can test that and see if it

goes well and so we did it. Then now we have a modding (modifying) community which is very active where we have a channel where we are talking directly with multiple modders and listen to what things they want. As it works now, players or modders can play in either a closed or an open realm. The closed one is the one we have designed and in the open realm you can do whatever you want and mod it how you want. But we take the best modders and sanction them, so we can add them to the main game. On the open realm you can cheat how much you want, but you are not saving any progress. There is also a lot of things from the modders and from that community which is growing when we are releasing modding material, there comes out a lot of things and it is an easy way for us to do it in. The community wants more stuff, and if we cannot keep up with that pace, then the modding community assist there as well. And then beyond that, we have also flown in the best players in the world and let them play Vermintide 2 before we released it for example. They lived here for a week and played every day and gave a bunch of feedback. Then we also have a few people we are in constant contact with.

(33:01) This feedback from the customers, do you consider in the game development process which segments they are representing? For example, that customers can be hardcore gamers and more casual gamers?

We definitely do. We primarily divide it into hardcore gamers... in the company there are those who are pulling the game in many different directions, but a lot of people are very concerned about the hardcore players, because a lot of them pushes the boundaries of the game and put out content on YouTube and draws in a lot of media when people manages to do a lot of crazy things. But at the same time, we want to make the game attractive for those who only play it once, so we are considering both of those parts. We are also considering that the games should have female characters and not be completely sexist and all those things and we think about them a lot. There are different groups within the company who are pulling those different parts of the entire process.

(34:34) After the release of the game, what are the most important activities you do? Are they the same before release or do they look different?

Bug fixing is one of the things we do, but that has decreased. In Vermintide 2 we do not have so many left, but it took half a year to get them out, we have driven them down to a level which is very low now. Then it also means a lot of if you move people to other

teams, so now we have different feature teams who do different things which will become DLCs in the future. So, it is a lot more production focused and creating new things for the game. So, mostly DLCs, but as well weekly events and such. So, a lot of newer things and bug fixing.

(36:00) You mentioned earlier that you considered various revenue models, as for example F2P, how has the choice of revenue model affected the game development? Do you see any direct connection in how you design the game?

To go F2P would mean that you receive a whole lot of players, so it demands an entirely different organization and different things. Something which we have worked with and try to include are dedicated servers for example, and if you are going to have dedicated servers together with F2P, that server park will be very expensive. So, then you need to have some model which means having some subscription if you want to play on them and various versions. But we have chosen to be quite kind when it comes to DLCs, we release every other DLC for free for example, or more or less free with some of the simpler DLCs. Every other DLC release we do is not going to cost any money. Then we have been thinking that we want to release things as skins and such to make more revenue for the company, but it is such a long drawn internal discussion, because many are worried that the player base will become angrier if we do that. All the various combinations have been discussed, we have been talking about loot boxes, and before we released Vermintide 1 the whole loot box things was not such a massive things as it is today, so there where some thoughts on whether to include it, but I believe it was Payday 2 who screwed it up with releasing options to buy better weapon in game which you could purchase with real money which is not really good.

(38:29) So, you would say that the choice is the one you thought fit the game the best?

Yes, and we are somewhere halfway in where we want to be, I would say. We would like to have a store where we can sell things for the gamers who want to buy it. We will probably start to experiment with such things in the future, we will go slowly and try, because we believe this model is not optimal either, for example to only sell maps is problematic because we do not want to split the player base and that is something which you are partly doing with this model. Our solution have been that it is enough for one

player in the group to have the map, but then there is not an incentive to buy the DLC if we do not add a bunch of weapons and cosmetic stuff.

(39:39) In the game development process, do you have any bigger expenditures or resource demands on top of personnel which are vital for everything to function?

Now I am no economical expert, but the most expensive things is usually motion capture for example, that can cost several million SEK. Then we can also outsource a few things as modelling, which can also cost a lot of money.

(40:31) But there are no programs which you require or so?

Yes, licensing fees can be quite expensive. For example, to license all the graphical artists, motion studio, so they can cost a lot. I do not have a very good insight into all those costs, because otherwise nothing will come close to salaries anyway.

(41:15) Did you develop Vermintide with Autodesk?

No, we built the game engine which was called Bitsquid, in 2014 which we sold to Autodesk, then we continued to develop it. Then Autodesk more or less closed down shop a year ago, but the engine is still used a by some developers, but they do not have the energy to go and compete with Unity and the others, so we continue with that engine but now we have made it to its own creation.

(42:02) So, it is something which you are continually developing?

Yes, we have our own engine team who sits and improves it quite a bit.

(42:14) When you are developing games, do you have strategies for when it comes to different platforms, for example with how you are releasing games?

PC is the absolute easiest to develop on, because all development is made on PC. If you are going to release to Xbox, you sit and develop on PC and run the program through a PC to have it run on the console. And PC is much faster, the roundtrip to start the games is much faster on a PC, we do almost all of the development on PC in fact. Then if we choose Xbox or PlayStation as the second depends a bit which console is the closest to PC actually, the one which is the easiest to get the frame rate up on. As now, when we released on consoles for Vermintide 1 and 2 the frame rate was down at five FPS (frames

per second) before we went through it and optimized everything. So, there is no special order, we are instead taking the one we see as easiest, and now that was Xbox. Usually Xbox is closer, because it is a PC essentially.

(43:58) But you are not designing different types of content to the consoles?

Not content, but we are designing all interface which becomes different on the consoles. The HUD-team (head-up display) has to sit another lap to fix for the consoles. Then design has to go and do a new design take on things as well, because you cannot play as well with a hand control as with a mouse and keyboard, you cannot turn around as quickly and that whole thing, so you have to tone down the difficulty slightly to be able to match it to PC. It is the same difficulty as on PC, but you have to be able to match it. And then the consoles are not able to render as much, be able to handle as much enemies and such, so we limit the number of enemies a bit, maybe 20 percent, and we have to do a few optimizations to make it flow good enough.

(45:05) Which role do the distributors have in the entire process? Do they have any say in the game development?

Extremely little I would say. We do get some tips from them, but that is mostly related with release of the game, in which order we should do stuff, the pricing, when we should have different sales and all that stuff. They know a lot about that stuff and they have a lot of data on it. Valve does not care at all, we do talk with them and get tips from them, but how the games work they do not care about. Microsoft and Sony have technical manuals which you must fulfil, where there are a bunch of rules such as not having a black screen for more than a second, you must be able to pull out the control at any time, and the game must always work whatever you do. So, it can have a thousand points which we need to fulfill and there can be some small design things, as for example the maturity rating. So, you can choose to rate yourself and get a sticker which say it is children friendly, which would be a problem for us since we are not children friendly. So, that we do not need to worry about. But it can also be that if you are releasing in Germany you cannot have any blood in the game, and in China you cannot have skulls and those stuff. But the big platforms do not care so much.

(46:46) The input from distributors on pricing, does that come when the game is essentially finished, or does it come combined with internal discussions on the pricing?

To Valve we can say that we want to release the game for 50 dollars and then they will say that “if you look at this game, which is similar, they are selling the most when they are selling it for 29,99 dollars so you will most likely sell more copies and get a higher revenue if you have that price at that moment”. And there you can discuss back and forth, and in the end, you choose yourself. But they do very often come with such feedback, so we have also discussed with them about models. You also release collector’s editions of the games which may cost ten dollars more and decide what should be in that collection, and they have experience and give suggestions on what to include and release. Then they want you to do more stuff, Valve wants for example that you should use their auction house where you can exchange things with each other where they get a cut on the profits. The same thing when we released Vermintide 1, a year later we did a deal with Intel and released Vermintide VR, a VR-game in the Vermintide world, where Valve and Intel cooperated, and we were included. We are also making deals with hardware manufacturers as well, as being able to add Alienware’s flashing keyboard support in exchange for a few million SEK or that we are standing with them at their fair booth. Or that Intel are able to put “Runs best on Intel”-stickers, it can be anything really. Now for Vermintide 2 we did a benchmark mode for Intel, but then it becomes sort of a strange thing that they want to show that the game runs better on their CPU, and we are not able to say that it might not be the case at times.