Livening up Video Games

a single case study of the live service practice in the video game industry

Petter Nilsson Wihlbäck (23394) and Gustav Sigling (23471)

Abstract

Propelled by the introduction of the Internet, the video game industry has and is shifting towards increased service offerings. This has caused an emergence of new business- and release practices, determinant to allow for the opportunities presented by service based gaming; some built on fundamental "box products", others on subscription schemes. One quintessential business practice to this shift, that has gone largely without research, is the use and incorporation of live services. The purpose of this thesis is to provide the video game industry and academics alike with a foundational description of the components of live services, how it affects opportunities for co-creation with players and how it is motivated in relation to the industrial shift towards services. A qualitative, single case study (built from the basis of a two-company pre-study) was conducted through eleven (11) in-depth, semistructured interviews of video game company professionals at an internationally acclaimed video game company operating from Stockholm as part of an international video game company group. The research questions were approached using grounded theory methodology and a systematic combining approach. The research's findings resulted in a proposed model of the live service practice, as well as thorough reviews of the video game industry's shift towards services through the use of live services against theories of co-creation and servitization. Increased opportunities of interaction between players and video game companies were found to provide opportunities for co-creation through live services, and motivational factors of the shift towards services through live services seemed to align with the factors described in servitization, barring an additional factor of expectations on the video game industry. While live services still warrant future research, this thesis is expected to have contributed both to industrial understanding of the live service practice, and directions from where to launch more in-depth research on live services, co-creation and servitization in the industry.

Keywords: live services, servitization, engagement, value co-creation, games as a service

Stockholm School of Economics

Course 629 - Marketing Thesis (with a joint examination exemption for course 619 - Management Thesis)

Course director: *Anna Nyberg* Supervisor: *Per Andersson* Presentation: *May 2017*

Foreword

This thesis is the result and culmination of the two authors' BSc studies of Business & Economics at the Stockholm School of Economics; SSE.

In keeping with the policies of the thesis courses, presentations and considerations of SSE this thesis has been made to comply with the bachelor thesis format set forth by the Marketing department of the school as put forth in course 629 during the spring term of the 2016/2017 academic year.

Petter Nilsson Wihlbäck

Gustav Sigling

Acknowledgements

First and foremost, we would like to acknowledge, and extend our utmost gratitude, to family and friends who have supported us through our academic careers.

We would like to thank all respondents who offered their time, thoughts and professional opinions, as it granted us the insights needed to build our research. The same gratitude is extended both the case study company and their company group.

Last, but not least, we would like to thank our thesis supervisor Per for informative tangents, as well as impactful epiphanies, brought on by our meetings.

- Petter & Gustav

Table of Contents

Definitions	5
1. Introduction	6
1.1 Background	6
1.2 Purpose and research question(s)	7
1.3 Delimitations and limitations	8
1.3.1 Delimitations	8
1.3.2 Limitations	8
1.4 Expected Contribution	9
1.4.1 Industry insights & base for future research	9
1.4.2 Theory expansion	9
2. Theoretical framework	9
2.1 Service dominant logic	10
2.2 Co-Creation	11
2.2.1 Value co-creation	11
2.2.2 Consumer co-creation	12
2.3 Servitization	13
2.3.1 Financial factors	14
2.3.2 Strategic factors	15
2.3.3 Marketing factors	15
2.4 Application of the theoretical framework	15
3. Methodology	16
3.1 Scientific approach	16
3.2 Study design	17
3.2.1 Pre-study 3.2.2 Theory building	18 18
3.2.3 Interview strategy and question design	19
3.2.4 Execution	19
3.3 Interview targets	20
3.3.1 Participating companies	20
3.3.2 Interview subjects	21
3.4 Data analysis tools, tests and theories	22
3.4.1 Tools and software	22
3.4.2 Empirical presentation and coding	22
3.4.3 Grounded theory methodology to live services	22
3.4.4 Review against theoretical framework	22
3.4.5 Iteration and evaluation of additional theories	23
3.5 Reliability, validity, trustworthiness and ethicality	23
3.5.1 Reliability and validity	23
3.5.2 Trustworthiness	23
3.5.3 Ethics	24
4. Empirical analysis	25
4.1 Live services	25
4.1.1 Classification	25
4.1.2 The role of content	27
4.1.3 Importance to company	27
4.1.4 Improvement and support	27
4.2 Revenue	28
4.3 Engagement	28
4.4 Utilisation of data	30
4.5 Past, present and future business models	31
4.5.1 Box products	31
4.5.2 Mobile gaming 4.5.3 Subscriptions	31 32
4.5.4 Disruptive potential of "internet-companies"	32
4.6 Customer interaction	33
5. Analysis and model proposition	34
5.1 Components of live service(s)	35
5.1.1 Content	35

5.1.2 Improvements	35
5.1.3 Systems	36
5.1.4 Data, feedback & communication	36
5.1.5 The link between engagement and monetization	37
5.1.6 Component model	38
5.2 Co-creation from live service(s)	38
5.2.1 Value co-creation and empowerment	38
5.2.2 Relationship to the live service model	39
5.3 Reasons to incorporate live service(s)	40
5.3.1 Financial factors	40
5.3.2 Strategic factors	41
5.3.3 Marketing factors	41
5.3.4 Industry factor of expectation	41
5.3.5 Implication(s)	42
6. Discussion	42
6.1 Relationship of contributing factors	42
6.2 Gray areas of individual definition	42
6.3 Boundaries between base game and live services	43
6.4 Critique and limitations	43
7. Conclusions and call for future research	43
7.1 Conclusions	43
7.1.1 What constitutes a live service?	43
7.1.2 What co-creation process(es) arise from video games that have live service(s)?	44
7.1.3 Why do companies in the video game industry move towards increased service offerings	through
the use of live services?	44
7.2 Contribution	44
7.3 Call for future research	44
8. References	46
9. Appendices	49
9.1 Illustration of past and present release practices	49
9.2 Satirical presentation of criticism of changing video game business practices	50
9.3 Examples of live service installments	51
9.4 Interview method - framework	53
9.5 Semistructured questionnaire	54
9.6 Figures	56
9.7 Tables	57

Definitions

Table 1. Definitions of recurring concepts and industry terms

Concept	Definition (in this thesis)
Service(s)	Defined as being performed rather than produced and essentially intangible
HD; High- definition	The sector of video games released on PCs or stationary video game consoles, such as Playstation 4 and Xbox One. HD games are defined by advanced graphics (usually 3D) and high production values.
Mobile	The sector of video games released on mobile phones, (most often) monetized differently than HD.
DLC; Downloadable content	Any additional content that can be downloaded to a video game, such as additional characters, new in-game locations, in-game tools etc.
Balancing	The process of adjusting game rules and in-game tools to make them function as intended and "fair" in terms of the game mechanics
FPS; First-person shooter	Video games involving gunplay from a first-person perspective point-of-view.
MMO; Massively multiplayer online game	Video games where the player interacts with other players in an online multiplayer experience, usually featuring a persistent online world and supporting large numbers of players.
In-game progression	The journey a player takes through a game, both by improving and receiving better in-game tools.
Live-service(s)*	Post-launch maintenance, optimization and content releases to a base game, conducted both as planned and in response to data-driven insights made available to developers.

* As suggested in this thesis

1 Introduction

1.1 Background

"The shift to game-services is a complete rethink of what it means to make a game.

Production processes, the composition of teams, what a shippable product is, how products evolve once they're live -- these are all fundamental changes that Western companies are just figuring out." - Daniel Fiden, in an interview for Gamasutra (Miller, 2013)

Historically, video game developers would commonly release a title and then start to work on their next game, whether that be a completely new experience, or a sequel to an established game franchise. Between the large base game releases, expansion packs for older games could be shipped to expand the games and delight the players. Interaction with consumers would however be limited between releases.

Today, the timeframe between two major releases (illustrated in Appendix 9.1) is instead riddled with offerings of downloadable content, updates to games are arriving more often than before and interactions between developers and customers are becoming more regular (Lizardi, 2012; Tyni & Sotamaa, 2011). This shift has not gone uncriticized by players (Handrahan, 2015; and as illustrated in Appendix 9.2).

The origin of these new business offerings and strategies (regarding revenue streams) have overall largely been attributed to the introduction of the internet (Harris 2015; Sotamaa & Karppi 2010; Nieborg 2015), as it shortened the distance between developers and players.

Owing much to the rise of digital distribution in video games (Euromonitor, 2017-03-17; Swedish game developer index 2016; Statista, industry dossier, 2017-03-17), games are increasingly shaped into services. This shift has been identified in previous literature, for example in Sotamaa & Karppi (2010) and in non-academic industry press (Sinclair, 2017; Shacknews, through Keefer 2016). It is said to have affected both the industry and the fundamental interaction between business and consumer (Stenros & Sotamaa 2009; Marchand & Henning-Thurau 2013).

The shift towards services has also been identified through the observations made by one of the two authors of this thesis, during a six month-internship at the case study company. During the internship, as well as the pre-study conducted, a term was frequently brought up and discussed in relation to the shift towards service-based games in the video game industry: live service(s).

The term was discussed in a way that made clear that it was becoming increasingly important for the studio, with more and more resources dedicated towards it. Live service(s) was often briefly described as "the service component of the game", or "the thing that happens after the game comes out, in the post-launch phase". However, no clear definition of the term was readily available. For illustrative purposes, some examples of what was considered live services are presented in Appendix 9.3.

While some explanations for the service-shift have been provided, such as the internet's impact on customer interaction, the rise of digital sales (enabling close contact to customers) and the goal of establishing longer term relationships (Sotamaa & Karppi, 2010), there could still be additional industry-specific reasons. By using the goods- continuum model presented by Oliva & Kallenberg (2003) (shown in Figure 1 on Appendix 9.6, and discussed more extensively in section 3 of this thesis) the situation can be displayed more clearly. In the continuum, a company on the far left of the spectrum view services as unimportant relative to goods, while a company on the far right sees services as very important relative to goods. With live services becoming more important, the case study company can be seen as moving to the right along the continuum. This presents an interesting opportunity for studying the reasons for moving towards increased service offerings through live services.

1.2 Purpose and research question(s)

Following the above introduction, the purpose of this study is to *examine the shift towards* services in the video game industry through the incorporation of live services. This is done through a qualitative case study of a prominent industry actor in the HD sector of the video game industry. Our overall research questions were therefore established to provide a direction for theoretical review, method applications, collection of empirics, analysis and review (Bryman & Bell, 2011).

To further explain said purpose, three research questions were posed. The first of which is meant to inductively build an understanding of the live service practice. It reads: *What constitutes a live service?*

Our second research question concerns the relational nature inherent to services that emerges from the interaction opportunities, that in turn arise through the live service practice. As further described in Section 2 below, services are relational by nature (Vargo & Lusch, 2004). This question will seek to understand what relationships and interactions between developers and players present themselves, and how this applies itself to feedback loops and

components of live services. It reads: What co-creation process(es) arise from video games that have live service(s)?

Following this, when the components of live services have been categorised through thematization of the empirics and reviewed against the co-creation theories, we will evaluate the inherent motivation behind a movement towards increased service offering through live services for companies in the video game industry against theories on servitization. The third and final research question therefore reads: Why do companies in the video game industry move towards increased service offerings through the use of live services?

1.3 Delimitations and limitations

1.3.1 Delimitations

This thesis is largely focused on the marketing implications of the studied topic and events. Therefore, we have given no emphasis to the organisational and management aspects, such as staffing, leadership and the like. While these are also related to the increased focus on service in companies and relevant findings will be noted, the bulk of our interest lies in how value offerings are affected, and the subsequent marketing implications of this.

The company we study in our case study is operating in the HD segment of the video game industry. Therefore, our findings are mostly relevant to the service shift in HD-games.

Furthermore, concerning services in the video game industry, we are not looking into services such as digital distribution platforms, e.g. Steam or Origin¹. We focus solely on service offerings that are present in the games themselves, and not those surrounding them.

Concerning the theoretical framework, we limited ourselves to a number of well-known and supported theories. Some theories that are similar to the ones chosen have therefore not been included in our theoretical framework. For example, we will not look at product service systems; PSS, an area of research that has a lot in common with servitization. It also concerns itself with sustainability, which is out of scope for this research.

1.3.2 Limitations

Our research ultimately focuses on a single game developing company through a case study. Further explained in the method-section, this decision was made for several different reasons, but excludes other actors perhaps relevant for the topic. Given that the company is based in

¹ Both are popular digital distribution and digital rights management (DRM) platforms, provided by the companies Valve and Electronic Arts, respectively.

Sweden, the results presented in this thesis might be limited geographically. The company is however part of a larger, international company group, which might offset this limitation through company-wide policies and workflows.

1.4 Expected Contribution

1.4.1 Industry insights & base for future research

Through our research we hope to further explain the trend of increasingly service-based games, review the use of live services, present an inductive model of its components and to contribute to a (today) thin body of academic literature on the business practice. Answering our research questions could help a wider range of video game developers understand the inner workings of their industry more clearly, and help in decision making whether or not increasing service offerings through live services is beneficial for their company.

1.4.2 Theory expansion

Historically, much of the literature on servitization (outlined later as part of our theoretical framework) has focused on goods-manufacturing, and we wish to expand this literature into other industries. We hope to illustrate implications of servitization specific for digital industries through reviewing how the concept manifests itself in the video game industry.

2 Theoretical framework

Our theoretical framework has been constructed from study of individual concepts and theories which we hope and expect to be able to combine successfully in a way that is relevant to our research. Below follows a short introduction to what motivated the choice of main theories, followed by a presentation of their most relevant topics and the resulting theoretical framework we have applied.

Service dominant logic appeared to be a fitting theory from where to gain a philosophical overview of how businesses and their offerings relate to services. To narrow the scope, while still pertaining to the same service related area of research, we included studies of the servitization phenomenon to test the introduction of live services as a service offering towards established research into what causes industries to shift towards services.

Theories on *co-creation* (both *value-* and *consumer-*) were included to examine how increased player-developer interaction; through feedback loops, telemetrics and shortened communicative distance, has affected business practices and -offerings. Furthermore, a selection of academic theories on co-creation are related to service dominant logic.

2.1 Service dominant logic

The way the role of services has been perceived has changed over time. In the early days of the 20th century, marketing theory was tangled up with the thoughts present in economics at that time. Goods were seen as the unit of exchange, and services were merely defined as "what goods are not" (Vargo & Lusch 2008c). When marketing evolved throughout the 20th century, the ideas shifted more towards an increasingly relational- and service-minded way of thinking, where customers are more in focus than the firm itself (Vargo & Lusch 2004).

Vargo & Lusch (2004) identified this shift in marketing thought towards a new dominant logic. They call this new logic *service dominant logic* (henceforth "S-D logic"). In contrast to this logic, they point out that the traditional way of thinking about marketing has been what they call *goods dominant logic* (henceforth "G-D logic"). Vargo & Lusch (2004) describe the shift and definitions of the logics as: "marketing has moved from a goods-dominant view, in which tangible output and discrete transactions were central to a service dominant view, in which intangibility, exchange processes, and relationships are central".

Vargo & Lusch (2006) define service as: "The application of specialized competences (knowledge and skills), through deeds, processes, and performances for the benefit of another entity or the entity itself", and stress the important difference between service (in singular) and services (in plural), where service implies the use of competences to do something for another entity - a process - while services implies a unit of output, which is more in line with G-D logic (Vargo & Lusch, 2004).

Vargo & Lusch have refined and added to their initial thoughts throughout the years, and S-D logic has been expanded and widened to include more than just a firm and marketing-focus. In 2004 they identified eight *foundational premises*; FP:s of S-D logic in their original article in 2004, then in the following years added a ninth (Vargo & Lusch, 2006: 53) and a tenth one (Vargo & Lusch, 2008d). In Vargo & Lusch (2014), the ten FP:s were distilled into four *axioms*, where all the FP:s could be derived from. Finally, an eleventh FP (and fifth axiom) became the latest large modification of SD-logic (Vargo & Lusch, 2016).

In this thesis, we focus on a few of the FP:s and not just the axioms. This is partly due to the vast scope of the S-D logic which, after many extensions and revisions from Vargo and Lusch, now covers many topics not directly related to this thesis. The FP:s most relevant for this thesis are:

FP1: Service is the fundamental basis of exchange (Vargo & Lusch, 2008d)

Traditional marketing and economic thoughts in line with the ideas of Smith (1904), saw tangible goods and manufacturing as the basis of all exchange. Value was seen as utility inhabited naturally in goods, and a firm could add value to these, meaning there was value in exchange. In S-D logic, service is what underlies all exchange. When trading, the two parties are directly or indirectly trading the competences and skills they have. A hunter trading with a farmer exchanges his/her skills in hunting, receiving the skills of the farmer. These skills and competences of agriculture are transferred through the traded goods. The hunter does not have to acquire the skills required for agriculture, but can indirectly purchase those skills.

FP6: Value is cocreated by multiple actors, always including the beneficiary. (Vargo & Lusch 2016)

As stated above, in G-D logic value was seen to be inherent in raw materials, and the products made from them. S-D logic sees value being inherent in use. The value for the customer is not created by producing a good. Instead, it is created when the customer learns how to use and experience that which was purchased. Therefore, the customer is always involved in creating value. The FP stated in 2004 read as: *The customer is always the co-producer*, and was revised in 2008 to read as: *The customer is always a co-creator of value*. Vargo & Lusch has expanded this FP further to a less company centric formulation, and now reads as the title stated above.

FP8: A service-centered view is inherently beneficiary oriented and relational (Vargo & Lusch, 2004; Vargo & Lusch, 2016)

Service, being a process, naturally puts a large focus on relationships. In S-D logic, both parties are central to the exchange, and what happens before and after a certain transaction is more important than the single transaction itself. Therefore, focus has shifted from a transaction-based view to a relation-based view.

2.2 Co-Creation

2.2.1 Value co-creation

Grönroos (2011) discussed the FP6 stated in Vargo & Lusch (2008), and deemed the statement to broad and unspecific; arguing that stating that the customer is always the cocreator of value directly implies that both firm and customer is involved in the value creation. To Grönroos, this would not be aligned with the notion of value being created in use by the customer, and not by the company.

Grönroos continues to define the role of the company as a facilitator of value creation, and not a value creator itself, since the company provides the customer with the resources it needs to create value. Therefore, there is no real co-creation of value in itself, by the actors. Grönroos instead brings up interaction as the key concept that enables co-creation.

Interaction is defined as when two or more parties are in contact and can affect each other. Both parties can influence and have an impact on the process of the other. Interaction is in a company/customer-scenario said to appear when there are service encounters present, for example when a customer receives service via a call center. Without any service encounters, there is no interaction and therefore no real value co-creation. Grönroos mentions an example of this where a customer is purchasing a good and then has no further contact with the company that produced it. That would mean no further interaction takes place between the customer and the company. Adding possibilities for the customers to get in touch with the company, for example creating a call center or an internet forum, could create additional possibilities for interaction, and therefore co-creation to occur.

By being active and participating in the creation-process of the company's offerings, the customer is then seen as a resource for the company. The company similarly becomes a resource for the customer in the value creation process.

Interactions between customers and companies are therefore enabling the existence of cocreation of value (as outlined by Grönroos in Figure 2 on Appendix 9.6). Without it, the customer is performing independent value creation and the company facilitating this creation, according to Grönroos.

Grönroos' theories were presented in response to what Vargo & Lusch named FP6 in 2008, and not what it denotes today. While Vargo & Lusch have since responded to Grönroos' criticism, Grönroos's definition of co-creation has still been given academic merit, and thus we have deemed it more practical and applicable to our research.

2.2.2 Consumer co-creation

There has been much research into the practice of consumer co-creation, mostly towards product-focused companies, and while there are different definitions of the concept itself, our focus was awarded the narrower marketing perspective approach of Liljedal (2016).

In her research, Liljedal drew on a large body of science and findings regarding both consumer behaviour, marketing communications and new product development. From the reigning academic and rather broad definition of consumer co-creation; "Consumer co-

creation takes place when two or more parties collaborate to create something of value", Liljedal ultimately narrowed a new definition of consumer co-creation based on O'Hern and Rindfleisch's distinction between consumer co-creation through contribution and/or selection from 2009 and Prahalad and Ramaswamy's discussion of value creation from 2004. Liljedal's (2016) definition reads as follows: "Consumer co-creation is a collaborative new product or service development activity in which consumers actively contribute and/or select the content of a new product or service offering, and where all active parties create and extract value from the collaboration".

Co-creation illicit responses of both participating (actively contributing in the co-creation process) and non-participating (subjects to the co-created product and/or service) consumers somewhat differently depending on if the non-participating consumers perceive the new product/-service in line with their view of the company and/or recognise the participating consumer's ability to contribute value effectively (Liljedal, 2016).

While co-creation might function as a source of empowerment for consumers, there is great care to be taken to acknowledge and respond to the contribution to not run the risk of achieving the opposite: a feeling of disempowerment or exploitation among participants that feel neglected (Liljedal, 2016).

In this research, the communicative and input-sharing aspect of co-creation is of particular interest. The introduction of the internet and subsequent digitalization of industries has facilitated for establishment of forums for communication between consumers and companies. In the video game industry this has manifested itself as feedback loops and indepth analysis of players' sentiments and in-game behaviour as a basis for operations; both of which seem largely relatable to co-creation practices.

2.3 Servitization

The term servitization (AKA servicification, servification) of traditional product-manufacturing industries was first proposed by Vandermerwe & Rada in 1988. They define servitization as a movement within the economy where "modern corporations are increasingly offering fuller market packages or 'bundles' of customer-focused combinations of goods, services, support, self-service, and knowledge.". In the same paper, they see services as being "performed rather than produced and are essentially intangible" T.S. Baines et al. (2009), having looked at the multiple definitions proposed in earlier years, define servitization as "the innovation of an organisations capabilities and processes to shift

from selling products to selling integrated products and services that deliver value in use". This shift has become evident through observation of how companies operate.

Oliva & Kallenberg (2003) discusses how companies are servitized to different extents. They propose a "product-service continuum" (presented in Figure 1 on Appendix 9.6) which companies can be said to occupy a certain point on. Companies occupying the left side side of the continuum handle services like they are "add-ons" to the tangible products. Here, the relative importance of services is low compared to the products being offered. When companies move along the continuum towards the right side, the relative importance of services increases all the way until tangible goods are seen more as "add-ons" to services.

Vandermerwe & Rada (1988) point out that servitization is largely customer driven. One manifestation of this is increased focus on building relationships with customers, instead of just trying to satisfy their needs through core business activities (Vandermerwe & Rada, 1988). Through broader offerings, companies try to offer a more complete offering to their customers. When first proposed by Vandermerwe & Rada it was described as a phenomenon that is "pervading almost all industries, is customer demand-driven, and perceived by corporations as sharpening their competitive edges".

Servitization is also still very much considered a trend across industries, describing how businesses are "forced to shift from their traditional product-manufacturing paradigm to the goods-services continuum by providing integrated combination of products and services. The adoption of service-based strategies is the natural consequence of the higher pressure that these companies are facing in the global markets" (Di Orio, Giovanni et. al 2016).

Servitization is said to have many causes. T.S. Baines et al. (2009) identify three different factors for servitization: *financial*, *strategic* (*competitive advantage*) and *marketing*.

2.3.1 Financial factors

The increase in service offerings is described as related to financial incentives. There can be large profit opportunities from offering services, for example due to the product only making up a small portion of the potential overall revenue for a product in many industries. For some companies, the main product sold can be used as a platform for additional surrounding service offerings, where the margins for the product may be low, but the services being offered having high margins (Wise and Baumgartner 1999). Services are also a more stable source of income than products. Having an ongoing connection with customers where they

pay in regular intervals, rather than once in a while when a new product purchase is made, leads to a more stable income for companies (Gebauer & Friedli, 2005).

2.3.2 Strategic factors

According to Vandermerwe & Rada (1988), the most prominent reason for why companies are moving towards services, is that they are trying to gain a competitive advantage. Setting up barriers to competition is one of the key benefits of pursuing increased service offerings. By establishing a close relationship with customers, through the natural ongoing connection from servicing them, companies can more effectively block out competition. Services also provide a way for differentiation in offerings, and can provide customer with value that can help homogenous products seem like they are customized. (Frambach *et al.*, 1997).

2.3.3 Marketing factors

When it comes to marketing factors, these revolve around the usage of services in the selling of products (Mathe & Shapiro, 1993), cited in T.S. Baines *et al.* (2009). Services help maintain customer loyalty, partly due to increasingly close contact between the seller and buyer (Vandermerwe & Rada, 1988). Services create situations where selling follows more of a repeated pattern, and customers become more open to marketing of additional products from the selling company (Malleret, 2006). A company who is in a service contract with a customer is in an advantageous situation to propose the addition of other services offered by the company to the customer. Also, offering services improve the company's ability to gather customer insights and personalize the offering to each customer. (T.S. Baines, 2009)

2.4 Application of the theoretical framework

The three theories above are combined to create the theoretical framework, to some extent illustrated in the theoretical model below (see Figure 3).

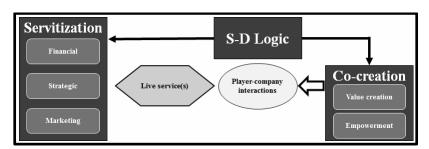


Figure 3 - Illustration of theoretical model and its application

The theories will however be applied to a different extent, based on individual applicability, in the examination of different research questions throughout the analysis of the findings of the case study, as presented further down in the empirics.

For the first research question, "What constitutes a live service?", we approached the empirics through a grounded theory methodological approach in an effort to inductively discern the defining components of the live service business practice.

In the second research question, "What co-creation process(es) arise from video games that have live service(s)?", our analysis was primarily conducted in regards to academic research on the topic of co-creation, with an emphasis on overlaps between co-creation and S-D logic.

In the third research question, "Why do companies in the video game industry move towards increased service offerings through the use of live services?", servitization was applied to review both the empirics and the live service components identified in the previous research questions against established theories. Servitization was useful for extending the different reasons for an overall shift towards services to an actual, individual business practice.

3 Methodology

3.1 Scientific approach

We started off by familiarising ourselves even further with the video game industry and its business offerings. As we apart from being researchers both are avid gamers and consider ourselves as having had layman-knowledge of the industry and its trends from the get-go, one of us were in the middle of a six-month internship at a Swedish, internationally acclaimed gaming company based in Stockholm at the time of our thesis. This proved to be very valuable as we had a live, active and immersive link to the industry through the on-the-job insight this provided us with.

An upfront assessment of the chosen field of study revealed that there is little to no research into the use of live events and -services in the video game industry (determined through our pre-study as a quintessential service-representative phenomenon), but some contemporary research of related fields that could provide insights (as detailed in section 2).

Some quantitative research was taken into consideration, especially during the initial review of the video game industry both in Sweden and globally, showing an increase in digital sales; considered a driver of increased service offerings, both in Sweden (Statista; dossier of industry information, 2017) and globally (Raghavendra & Krishna, 2015).

Ultimately, the lack of what could be considered immediately applicable data or comparable research warranted a qualitative approach conducted as exploratory research (Bryman & Bell, 2011). Thus, we established early on that our research's most fundamental contribution would be to serve as an indication of how best to shape future research on live services.

While originally thought to be composed of a series of qualitative interviews with a variety of industry actors, we soon focused the qualitative assessment into a case study of a well-established gaming company. This transition was brought on naturally by a combination of access to research subjects, increased emphasis on systematic combining (Dubois & Gadde 2002), and effective use of time by avoiding unnecessary gathering of empirics (Kvale 1997).

We decided to apply a *grounded theory* methodology (Glaser & Strauss 2009) in regards to our review of the live service(s) business practice, motivated by the fact that there is no available industry definition to what a live service is, nor is there sufficient research from where to adopt an academic definition.

The decision to otherwise pursue an overall iterative, *systematic combining*-approach (Dubois & Gadde 2002) was warranted by the exploratory element of the research as it allowed us to test and retest our research questions and overall approach as best our findings indicated it (See Figure 4 on Appendix 9.6 for an illustration of systematic combining). The ultimate research could be described as *informed basic research*² (Van De Ven, 2007) and as researchers we aimed to profile ourselves as knowledgeable enough to understand relevant concepts as described by our interview subjects and collaborators.

3.2 Study design

As the main purpose of our study was to gain further insight into how increased service offerings through live services have changed the video game industry, the study itself became investigative and exploratory in nature. Our aim was to provide a frame of reference for future research on the subject, justifying a qualitative approach (Bryman & Bell, 2011).

We elected to gather empirics through in-depth, semistructured interviews with industry professionals at mid- to high-level managerial positions with insight into operations, as well as operators and specialists (i e game developers, - engineers, technical architects etc). This is considered part of the format for a vast majority of qualitative case studies (DiCiccio-Bloom

² As defined by Van De Ven: "Informed research resembles a traditional form of social science where the academic researcher adopts a detached outsider perspective of the social system being examined..."

& Crabtree 2006) and was set to provide a mixture of openness of respondents and informative direction to the research (Bryman & Bell, 2011).

3.2.1 Pre-study

To garner an initial understanding of both the video game industry, the information that industry actors might be able to make us privy to and how the phenomenon we set out to research was spoken of amongst professionals, we conducted an informal pre-study through talks and discussions with mid-level representatives of game developing companies. During these talks, we sought to examine what recent changes and phenomenons were affecting the industry, especially in the form of the increased service offerings we had identified through our initial assessment of the industry (Nieborg 2015; André Marchand & Hennig-Thurau 2013; Sotamaa & Karppi 2010; Stenros & Sotamaa 2009).

The pre-study provided a necessary basis of knowledge from where to expand the research. It allowed us to structure both qualitative and quantitative aspects of the study and plan for how best to ensure beneficial participation of industry actors. We spoke with representatives (see Table 2 on Appendix 9.7) at two major gaming companies, from different areas of operations in an attempt to cover both the marketing and analytical aspect of increased service offerings through live services and how they are tailored toward customers through business offerings.

During the pre-study, the terms "live events and -services" were brought up and used frequently by both respondents, most often as a de-facto example of how their companies increased their service offerings. As the pre-study respondents defined the concept rather differently, and a quick literature review on the term revealed no clear definition, we decided to pursue "live services" (the seemingly broader term of the two) further in the main study.

Another concept that emerged during the pre-study was how increased service offerings in the video game industry affected the relationship between consumers and the gaming companies. It was discussed as to how it made concept testing and -feedback much quicker and responsive, in both new product development and new service development, describing how player sentiments and -feedback are involved in their processes.

3.2.2 Theory building

A literature review of the findings from the pre-study suggested that our research questions and subsequent theoretical framework be best centered around three dominant theories: *servitization, consumer co-creation* and *service-dominant logic* (as outlined in section 2).

As all three theories have garnered a significant body of research, the theoretical framework was established through an assessment of which concepts of the theories would be best used to examine the research empirics.

3.2.3 Interview strategy and question design

We established and rehearsed a strategy regarding how to conduct, record and follow-up our interviews (outlined in Appendix 9.4) to allow for the empirics to be reliably gathered in regards to best practice interview techniques and described research methods (Bryman & Bell, 2011; Merriam, 1988; Berg, 2004; Kvale, 1997; Lincoln & Guba, 1985)

Following the findings of the pre-study we categorized our questions in four main areas: *general observations, servitization, co-creation* and *customer journey*. The general observation-questions were to serve as an introduction during our effort to establish rapport with the interview subject, and allow for effective and efficient gathering of empirics in subsequent question categories.

To ensure responses free of self-censorship and -monitoring or prevent events where we as interviewers could risk involuntarily leading the interviewees, we elected to primarily use open-ended "how"- and "what"-questions (see Appendix 9.5) absent of any imposed values and/or indications. This also applied to follow-up questions.

While we did not determine the exact number of interviews beforehand, rather opting to pursue organizational access as far as we could, we felt satisfied after having scheduled eleven (11) interviews in addition to our pre-study. This was part in due to that we started observing recurring themes right away (eventually interpreted as *empirical saturation*, as described by Ahrne & Svensson in 2011) and part in due our limited resources (time).

3.2.4 Execution

When conducting the interviews, we made sure to set aside time with the company representatives where we met them at their offices. We arrived early to be able to prepare a quiet and uncluttered location from where would be able to conduct the interview without being disturbed. All interviews were carried out in identical conference rooms, all but three in the same actual room.

When prompted by the company, we signed non-disclosure agreements; NDAs, with the organisation. While we were not looking to uncover or study any specific professional secrets or strategies, the signing of an NDA provided an opportunity for us to ensure that the

interviewees could speak freely and unrestricted. All participants in the study were extended quotation- and representation approval of the finished text.

We began the interviews by informing the interviewee that they would be kept completely anonymous and that any inhouse discussion of their answers would have to be pre-approved by them - again, a necessary ease of mind in terms of self-monitoring and/or censorship. All of them were asked to give their permission for us to record the interviews and all subjects agreed. The recorded material, kept and transcribed by us and will be deleted in due time.

While we tried to prepare for and make sure that initial interviews were conducted in one sitting, our interview subjects had to be on call to answer organizational requests within the company. Two interviews were put on hold and were both assumed on the same day as they were commenced, respectively.

On all but one occasion (an on-hold situation halfway through the interview that caused a severe scheduling conflict), there were two interviewers present for the entirety of the interview. During the interviews, one interviewer (determined on merit of relation to the interview subject; closer perceived relationship as a qualifier) would act as the main interviewer while being supported by observations and the occasional entry from the second interviewer (see Appendix 9.4).

3.3 Interview targets

3.3.1 Participating companies

Swedish and international gaming companies were approached to participate in the study, Participating companies were said to have to: be developing games and actively release titles and/or expansions, be readily observed as offering live services and having been in business for a minimum of ten years to date.

These qualifying criteria were set as an effort to observe and research the approach of established, significant actors in the video game industry. Less established and/or experienced companies would be more likely to exhibit disruptive behaviour, and would therefore provide a less credible basis for research into common industry practices (Anthony, Govindarajan, Hartmann, Kraus & Nilsson 1998).

While we approached international gaming companies, we knew that our qualitative approach would be easier to facilitate if we could meet with a company with offices in Stockholm.

Luckily, Stockholm is a hotbed of gaming companies of international acclaim (Sölvell, Fohlin, Protsiv; 2015).

During our pre-study we engaged with two major Swedish gaming companies that fit our criteria, but dealt in completely different platform segments (one almost exclusively releasing mobile games, the other working predominantly with PC and console games).

As our pre-study progressed and we were shaping our ultimate research we realised that a multi-company study would be very time consuming under the circumstances, and possibly even affect the recording of empirics negatively. Through a discussion with our thesis supervisor, Per Andersson, we were also made aware of the benefits of single source case studies over multiple source case studies as outlined by Dubois & Gadde (2002).

As we continued to engage with both companies it became apparent that while the PC/console release company was easily approachable and allowed us access throughout the organization, the mobile release company grew increasingly distant. While they never explicitly declined participation, they turned unresponsive to our repeated inquiries. Our initial point of contact further hinted at that the managers above him might feel inclined to censor themselves as the "service and product optimization is very core for our business" and that they might feel as we would essentially be sharing in trade secrets and practices that would be sensitive regardless of signed non-disclosure agreements. In the interest of concentration and access we therefore opted towards a single case study.

3.3.2 Interview subjects

The interviews were targeted towards mid- to high level managers and professionals at the case study company from a variety of business- and operations areas throughout the organisation. Rather than just interviewing representatives from one part of the organisation (e.g. brand management) we elected to target several areas of operation to ensure a broad organizational sentiment.

After reflecting on the fact that a variety of roles rather than a specific one might undermine the depth of the study we made sure to interview a minimum of two professionals for each area of operations. When possible, we saw to interviewing multiple representatives of very similar or overlapping roles (e.g. brand manager - senior brand manager).

Ultimately, a total of eleven (11) interviews were conducted over three distinctive areas of operation: *marketing*, *business analytics* and *development* (see Table 3 on Appendix 9.7). The respondents had spent an average of ten (10) years in the video game industry (range: 5 to 17).

years, median: 8 years, standard deviation: 5.51 years) and five (5) years at the company (range: 1 to 13 years, median: 3 years, standard deviation: 4.32 years), and many of them had joined from other digital industries (mainly software development). Three (3) of the respondents were female, eight (8) were male.

The interview subjects were allowed to choose their preferred interview language between English and Swedish, which resulted in eight (8) interviews in English and three (3) in Swedish. It is worth to note that the interviews conducted in Swedish still saw use of several industry terms in English, i e "engagement".

3.4 Data analysis tools, tests and theories

3.4.1 Tools and software

The bulk of the presentation of this research was made through using a combination of the program suites of Office and Google Drive. Interviews were recorded on smartphones and transcribed through the tool oTranscribe³. References were catalogued using RefWorks⁴.

3.4.2 Empirical presentation and coding

Following their transcription, all interviews were grouped in accordance to themes and codes (Berg 2004) in their responses relative to the semi-structured questionnaire (see Appendix 9.5). An assessment of both the aggregate sentiment of the respondents and against the theoretical framework then determined which themes were interesting for further review, whereafter these themes to became the basis for deeper analysis.

3.4.3 Grounded theory methodology to live services

The first research question, that sought to determine the components of the live service business practice, was conducted through a grounded theory methodology of empirical review. The resulting findings were then presented as an inductive model of what components live services consist of.

3.4.4 Review against theoretical framework

Where otherwise applicable, the empirics were evaluated against the theories in the theoretical framework with the purpose of revealing conformity, discrepancies between or deviation from the inherent concepts and theories. In the interest of revealing similarities,

-

³ http://otranscribe.com/, 2017-05-01

⁴ http://www.refworks.com, 2017-05-01

discrepancies and correlation between both themes and outliers amongst the interview responses they were studied both in isolation and in combination with each other.

3.4.5 Iteration and evaluation of additional theories

As an application of the systematic combining approach, iterations and evaluations of empirics, analysis and data were treated as opportunities to expand the theoretical framework with new and applicable references and theories. An example of such an addition was the theories on value co-creation, that after review of the pre-study and a sparked interest into how a trend towards service offerings through live services might affect customer interaction, were included in the theoretical framework to review any such effect.

3.5 Reliability, validity, trustworthiness and ethicality

3.5.1 Reliability and validity

Reliability is largely concerned with the repeatability of study; it's rigidity, stability and reliability in terms of whether the similar methods would produce similar results (Bryman & Bell 2013; Yin 2014). For a qualitative single case study the bulk of criticism towards reliability is directed towards repeatability under different circumstances. To strengthen this study's reliability, we have attempted to be entirely transparent regarding methods of gathering, presenting and analysing the empirics, to provide grounds and conditions for repetition. We consider the thesis largely reliable under the methods through which it was conducted and are confident that a study repeated through similar methods would produce similar results, even accounting for multiple cases.

The concept of validity has been considered divisible into internal (regarding comparability between the empirics and finding of a study) and external (the degree of generalization of the findings to reality) components (Bryman & Bell 2013; Yin 2014). The choice of subject of the case study; a prominent, active and well-known player in the industry, and the nature of the study itself should allow this research a certain degree of external validity. Also internally, the research is due some recognition of validity, as further aligned in the following description and comparison of empirics, analysis and conclusions.

3.5.2 Trustworthiness

Another core quality of research derives from the degree of trustworthiness that it can be rewarded. For qualitative research through a naturalistic approach this is said to be best

determined through establishing a study's *credibility*, *transferability*, *dependability* and *confirmability* (Lincoln & Guba 1985).

Credibility is in reference to the inherent truth of the findings of the research in question and can be established in a variety of ways, such as *referential adequacy*⁵. In this research credibility was mainly established through prolonged engagement (observing the case study company internally through a six-month internship), persistent observation (pre-studies and in-depth reviews), triangulation (of both methods, analysts and perspective) and limited application of deviant case analysis (reviewing outliers and "isolated" sentiments).

Transferability determines the degree to which the research is applicable to other contexts than that of the research itself. This can, and was in this thesis, established through thick description of both method, empirics and subsequent findings.

Dependability is concerned with to what extent the research findings can be shown to be consistent and repeatable. While we opted against an extensive and formal approach to the inquiry audit-technique of establishing dependability (due to limitations of resources and time), our research was continuously reviewed by our thesis supervisor.

Confirmability refers to the extent to which the research findings are free of bias and/or motivated by bad faith, and therefore reflect the respondents rather than the researchers themselves; essentially, to what degree the research is neutral. In our research, we tried to actively remain aware of and refrain from identifiable bias of our own and established an extensive audit trail which was made readily available to our supervisor. This audit trail will be kept for a due period of time and is available for review through SSE.

3.5.3 Ethics

_

A review of the ethicality of the methods used centres around both honesty in theoretical review and responsible handling of the interview empirics as well as anonymity of both respondents and the case study company. All citations and theoretical applications have been made in good faith, to the best of the authors' abilities and material, empirics and data from the interviews has been treated responsibly in terms of assuring the anonymity of both respondents and the respective participating companies. All interview subjects have given their approval to be recorded, informed as to how the material has been handled as part of the

⁵ Involves identifying a portion of data to be archived, but not analyzed. The researcher then conducts the data analysis on the remaining data and develops preliminary findings. The researcher then returns to this archived data and analyzes it as a way to test the validity of his or her findings. (Lincoln & Guba 1985)

research and given their approval to any and all representation of their sentiments herein. All recordings, transcriptions and notations in regards to the interviews not directly referenced in this thesis will be promptly disposed of, pending the completion and review of this thesis at the Stockholm School of Economics.

4 Empirical analysis

The interview responses have been described below, grouped in terms of common themes or areas of reference/concern. Responses and quotations from individual respondents have been denoted in relation to the respondent's role in the studied organization and the area of operations this role is said to adhere to the most.

The business areas (as described previously in table 3) are denoted as follows: BAL for business analytics, DEV for development and MAR for marketing. Respondents within the same business area are discerned through a subsequent numerical denotation, like so: DEV-2. In the event that a citation is translated from Swedish to English the verbatim transcription of said quote is displayed in a footnote on the corresponding page.

4.1 Live services

A vast majority (all but two of the interviewees) of the respondents bring up live services before the term or concept is mentioned by the interviewers as part of an inquiry or question. All respondents consider live services a focus area of both their organization and the video game industry as a whole. "[regarding service offerings] Extremely important, that's kind of where I think growth is. [...] And that's why live services is a strategic area of investment for [company group]. They are seeing the biggest growth that will come from this in the future, and I would say already is coming from there." (MAR-1)

4.1.1 Classification

While all respondents seem to have both ideas and opinions of what live services are and consist of, definitions and characterisations differ among the interviewees. However, all of the respondent discuss how live services are primarily related to what comes after a game is released; what happens during the post-launch phase in the game's lifecycle.

A couple of models and acronyms arise in relation to discussions regarding live services; some revolving around an acronym model called AERMO; *activation, engagement, retention, monetization, operation.* In most instances, however, it is for live services condensed to primarily consist of activation, engagement and monetization.

Alternative definitions range from broad, to more narrow, to centered around core concepts of increased interaction between games, player and video game companies; "I view it as more of a continuous-ish interaction between the gaming studio and fans." ⁶ (DEV-3).

Some respondents expand the definition of live services to discuss the characteristics of the practice, for example regarding notion whether live services have to be *live*; i e happen in real-time to be considered "pure": "Some of this is ambiguous, right? But in it it's most simple definition: live service, 'unless it's live...it's not really a live service, is it?'. That's a purist definition.." (MAR-3).

Expansion packs seem to be something of a conundrum for the respondents to classify. While some respondents want to include all expansions as a content part of live services others want expansions classified outside the practice, on account of that expansions lack reactive elements: "[on whether they would classify expansions as part of live services] No, I would not. Just in terms of that it isn't reactive content" (MAR-5).

Reactivity emerges overall as an important ingredient to live services. For example, respondents describe how a game's post-launch might be completely planned out in terms of when content, patches and updates will be released, but what these releases will consist of at time of launch is not determined beforehand. Rather, it is constructed and packaged based a continuous assessment of player behaviour and sentiment from the launch date.

A few of the respondents bring up how live services are built into the game, through gameplay systems: "I think you have games like [online multiplayer FPS], where it's very blurred, where the live service is very built-in to the core product." (MAR-4). MAR 2 discusses how the content that is already available in-game could be presented differently, and thus engaging players without having to create new content. One of the given reasons for this is that content is both time-consuming and costly to make, while presenting the content in new ways is significantly faster and less costly. DEV-2 gives examples of this re-presentation of content by mentioning how these systems have always been in games in the past, but now they can be connected to the internet. The developers would for example be able to change certain aspects of the game, for example the time of day on a specific level, without having to release a patch for it. DEV-2 goes on to mention how this could be done from week to week to change the experience of the game, without the need for additional content.

-

⁶ "Jag ser det mycket mer som en, liksom, en regelbunden interaktion mellan spelstudion och fans."

4.1.2 The role of content

Content in all forms; be it as added in-game experiences, new equipment or playable characters, options of customization or even in-game lore are discussed as something of a central aspect within live services. To provide new content throughout a game's lifecycle is described as essential. As described by DEV-2: "So from the day of launch, there's content planned out for at least two years and then after two years the next game is coming out.

At the same time, respondents are quick to note that there is more to live services than content: "Because live services isn't just content, it's the things in between there, it's the balances, it's the interaction with the community, it's trying to create different events in game. Like maybe it's a themed operation they only bring up once every three months or something like that." (DEV-1). MAR-1 mentioned how content releases could essentially be described as small parts of a box product.

4.1.3 Importance to company

Although all respondents suggest that live services are in focus; on the agenda of both their area of operation, organization and the industry as a whole, they ranked the focus very differently. While some respondents consider live services the number one area of concern, others suggest that it is growing in importance, but still second to core box products.

Inter-organizational and -company group focus is by a vast majority of the respondents described as having emerged only recently as an outspoken, solidified vision. Opinion is divided among the respondents as to whether their company is a thought leader in the industry or if it is a laggard that is trying to catch up to the rest its actors.

Regardless of degree of focus, live services are described by the respondents as a business practice wherein both the industry and their company now seeks to optimize their value offering to players.

4.1.4 Improvement and support

Eight of the eleven respondents discuss how improving the in-game experience is a fundamental component to live services, both in the form of support (troubleshooting, maintenance etc) and in improving the actual experience of the game itself through tweaking and optimizing the established offering, in terms of both content, systems and infrastructural game mechanics. MAR-1 even suggest that the optimization process is central to what live services are supposed to be driven by: "That's what live services are fuelled by. Tweaking and

optimizing and improving".

Improving, supporting and optimizing the game is often mentioned in unison with continuity and continuous communication with the player base. While respondents make note of that few improvements or tweaks are taken directly as-is from player feedback (as it has to be checked towards hard data), feedback in forums and the like is influential on "quality-of-life"-improvements such as the balancing of in-game tools.

4.2 Revenue

All the respondents bring up increased revenue opportunities that the live service practice provides the video game industry. Many respondents described these opportunities as more financially sound than other practices; BAL-1, regarding the reasons for increased service: "Because it generates more revenue. The simple answer is: [company] is a business that wants to earn money. Live services, have shown that they generate more revenue than old business models."

Some respondents couple their description of how live services drive revenue with an emphasis on how they receive attention primarily for cost related reasons; more revenue sources not being needed to secure higher profits, but to cover rising costs of development: "So you have these development costs rising, these marketing costs rising, but your product price stays the same, so you have to look at other revenue streams" (MAR-4).

4.3 Engagement

Driving engagement is brought up by every respondent as a main motivation for what one hopes to achieve by moving towards services through live services. Engagement itself is talked about as being beneficial in many different ways, several respondents claiming it the most important aspect of any business offering of a video game company - regardless as to whether one focuses on products or services. As characterized by DEV-1: "I think the hope for live service is that, people that maybe aren't as engaged to want to be engaged with the product. You know, 'I want to be engaged with the product, I'm missing out on doing these cool things...".

Some respondents mention the increasingly populated video game market where there are a lot of video games for players to choose from. Driving engagement from players is said to offset those challenges, by keeping the player invested in the experience and experience benefits of not playing another game. When discussing how they want players to feel in regards to engagement: "Should I play [franchise title] or should I play something new? No, I

play [franchise title] because there's always new fun things coming out in that game. Why would I ever go somewhere else, they keep me entertained here" (DEV-3). Keeping players engaged over a longer period of time is also said to benefit reengagement, meaning that if a heavily invested player has quit playing the game they will be relatively easy to reactivate.

A majority of the respondents brought up that players today expect a longer engagement with games, and that not having a service will raise questions. DEV-1 mentioned how not being able to clarify plans for the future of a game might deter players. A theme brought up in relation to these expectations was how there is an inherent need for games to change and evolve over time to remain interesting. DEV-4: "One of those key pillars when thinking about services is that you'll be surprised and you'll feel like you're part of something that is constantly evolving and changing [...] Everything becomes boring if nothing changes"8.

MAR-1 and BAL-1 discuss how driving engagement in a game also benefits upcoming games in the same franchise. It is pointed out that recency in players' minds will help the sales of the next game and that active players, having exhausted all there is to do in a certain game, will be ready for the upcoming title once that one comes out.

MAR-3 brought up how increasing engagement through introducing live services in games might help to mitigate problems with people selling their games in a secondary market: "...the more people keep their discs longer periods of time, the more you're able to deter secondary market which most of the developers and publishers never take a part in".

MAR-1 stated that due to the nature of multiplayer games, having strong engagement is crucial due to the need for other players to play with; discussing how a community must grow past a critical mass: if there are too few people playing a game, it will not be as much fun.

It was seen as apparent among the respondents that engagement has close ties (some describing cause-effect relationships) with revenue, especially through monetization of games: "I would actually like to say that engagement is our primary measurement of success, really. But on the other hand that is due to that it, like, results in revenue." ⁹ (BAL-2). MAR-5 furthers the notion of engagement's relationship to monetization, specifically when in-game

⁷ "...ska jag spela [franchisetitel] eller ska jag spela något annat nytt spel som har kommit? Näe men jag spelar [franchisetitel] för att det kommer hela tiden nya roliga saker där. Varför ska jag nånsin gå någon annanstans, dom håller mig ju underhållen här.""

⁸ "En sån här nyckelterm inom vårat service-tänk är ju att du kommer bli överraskad och du kommer känna att du är del av nåt som konstant utvecklas och förändras [...] Allting blir ju långtråkigt i längden om ingenting förändras."

⁹ "Egentligen skulle jag vilja säga att engagement är vårt primära mått på success egentligen. Men det i sig är ju för att det resulterar i revenue liksom."

progression is monetized: "Obviously, the way at which, there is monetization that needs to be worked off the back of it, but the good thing is that monetization and engagement loops are very closely aligned in terms of progression in game".

4.4 Utilisation of data

The live service practice was frequently described as allowing for as well as utilizing a datadriven approach to the value offering of video games where data is used strategically.

The ability to better understand and use feedback is mentioned as one of the benefits of the data-driven approach inherent in the live service practice. Many respondents discuss how feedback from forums or other communication channels between players and developers can be backed up with additional, related data from the game itself. DEV-1 discussed how player feedback, e.g. complaints about a specific in-game tool, could be tested in terms of validity against recorded data of how the tool is used from the game itself. MAR-3 describes it as: "...build the right systems in place, so that you can register the data, understand players needs and respond quickly. And that unlocks a whole host of other scenarios, where we can understand and solicit feedback."

Respondents brought up the improved ability to segment the players in-game and personalising their experience (and how they are targeted with additional offerings) as something inherent to games with live services. With the increased use of data from the game, segmentation and subsequent targeting of different types of players can be done effectively, using personalized messaging and in-game content to better fit individual player's needs. MAR-4: "And then we change that content dynamically in game by anticipating what kind of a player you are. So, if I'm a player who really likes singleplayer content, then when I go into the game that may be the first thing that's served up to me. Or if I particularly like the flight game mode, then that would be served up to me."

DEV-2 mentioned how the data can be used to identify where the player is in their life cycle. In-game data is described as essentially able to be used to identify whether a player is playing the game for the first time, if they are leaving or if they are heavily engaged. This in turn allows for additional, personalized messages/offers to be presented to different players. "And you can see see the customer, if we revisit that question: How does the customer behave? The

customer goes through a journey when they're about to play a game. And it's important that we take care of them through that journey and see to their needs..." (MAR-2).

4.5 Past, present and future business models

The video game industry is described as seeing a variety of established business models, present across all different market segments and sectors. Many of the respondents mention how business models are not mutually exclusive, and that rather many of them allow for combination, which in turn can can be achieved with varying success.

The risk of becoming outdated if not changing and evolving in terms of business offerings was mentioned by many of the respondents. Just by staying in the same place as before is described as risky. MAR-1 explained: "I think it's very much the idea that if we don't change, and we only stick with box products, we'll be a dinosaur."

4.5.1 Box products

The concept of "box products" is by all respondents likened to what video games traditionally have been conceived as; cassettes, disc etc - constructed, packaged and retailed as a shelved product. It is also used as a denotation for the backbone offering from which live services can be extended; the "base game". Some respondents make a distinction between what a base game is and box products as a business model, but it is clear that box products has been something of a foundational offering historically.

A number of respondents mention that some video game genres have historically been coupled with business models largely free from the box product model, on account of either their gameplay or how they have been made available to players: "...working on an MMO-game; that has never been anything but a service game. And there was never... I think we considered a box product attempt in 2010, but we had never done that, and it was just crazy in our minds: Why would you take an online digital service and then put it on a cd and then put in a plastic box and then ship it somewhere, it's just... *shakes head*" (MAR-1).

4.5.2 Mobile gaming

Mobile gaming is mentioned frequently, and the majority mention mobile games as having established the business models that developers in the HD-world are striving towards, MAR-2 going as far as speaking of a mobile gaming revolution: "[regarding the trend towards

¹⁰ "Och man kan se kunden, om vi återgår till den där frågan också: Hur kunden beter sig? Kunden går genom en resa när de ska spela ett spel. Och det är viktigast att vi tar hand om dem under den resan och ser till att deras behov…"

increased service offerings] I believe that it started to a large extent together with the mobile game revolution"¹¹.

The mobile gaming industry is described as being particularly far ahead in terms of data utilization, reactivity and proactivity based on player behaviour and when it comes to live services; some respondents suggesting that mobile gaming has captured the live service element completely: "And [mobile games] are truly live services. It's relevant for us in the live services arena because there... In a lot of ways the mobile business, just by virtue of their business models, are much farther ahead in how they think about service." (MAR-3)

4.5.3 Subscriptions

All respondents discuss subscription based business models during their interviews. Many of them extend this discussion to a description of subscription scheme gaming as something of an end goal in terms of service offerings. Links and references are frequently made to other digital- and entertainment industries; Netflix and Spotify are both mentioned several times as examples of established and possible future applications of service structured games.

Meanwhile, a couple of respondents (MAR-1 and DEV-2) express scepticism as to whether players would accept all games transitioning to a full-on subscription model on account of the amount of content they offer. Both of them suggest that Netflix succeeds on account of its function as a library of different genres and titles; an equivalent of which would be impossible to achieve for individual game titles and, arguably, for company-wide product access schemes as well.

4.5.4 Disruptive potential of "internet-companies"

Other digital companies, whom by some respondents are described as "born out of the internet" are named as possible disruptors to any and all current business models, suggesting introduction of both crowdsourced and episodic content. Amazon and Google are noted with particular potential of introducing new ways to market games and gaming experience by a number of respondents, DEV-2 suggesting that "[case study company] probably will, or I'm fairly sure [company group CEO] is worrying about what happens when Amazon gets serious about games, what happens when Google and Apple start to get serious about it. They start to think 'well, what does the Netflix of games look like?', and it's not going to the shop with sixty dollars and I think that's probably what keeps them up at night".

-

¹¹ "[angående servicetrenden] Det började ju mångt och mycket med mobilspels-revolutionen tror jag"

4.6 Customer interaction

Increasing service offerings through the use of live services is described as having a positive relationship to increased opportunities for interaction with players. The introduction of the internet; shortening the communicative distance, is mentioned regularly as a both defining and revolutionary event.

The customers are said to be involved in the development of the video games in many different ways. Market research is mentioned by several respondents as one of the core ways customers are involved in shaping the games and their live services. This research is conducted through both qualitative research as well as quantitative. Focus groups and surveys are said to be common.

Also mentioned is the having contact with core players in the video game community who can help guide some decisions in the way that will best fit the video game community. These core players are determined to have insight into what the community would best see fit in the game. DEV-1, when discussing how the core players help: "And I think that, taking all that [input from core players] into account when we make games is helping us get to being even closer with the community in terms of what is a great offering for them."

Many respondents mentioned that shortening the time it takes to respond to consumers is seen as very important, stemming from the overall shift towards services. DEV-3 talked about the frustration of not being able to react to feedback in a quick and reactive way, and that moving towards service-thinking could help in reducing the time taken to do this. MAR-5 mentions how the feedback loop needs to be quicker, and DEV-4 explains how there is a goal to have a faster cadence in this process: "What we're trying to do is to shorten that time, that's what is a big part of service-thinking. So that we can be more reactive on a much faster cadence than waiting until the next box (game or large update) comes along." ¹²

DEV-3 discusses that in the desire to involve customers further there's a desire to let players choose some of the new content coming to the game through live service. This would then make customers feel more involved: "So they'll get to vote [on content] and then we do it.

33

¹² "Det vi försöker göra är ju att korta ner den tiden, det är det som är en stor del av service-tänk. Så att vi kan vara reaktiva på en mycket snabbare kadens än det här med att vänta tills nästa låda kommer."

You know, it's very basic, but the more of those things we can add, the more they'll feel part of the development". ¹³

Continuous feedback from the players outside of market research is described as important by a majority of the respondents. Feedback is used both before launching a game, but also after the launch, during the live service. Feedback is said to come from the community through different social media channels like Twitter or internet forums. However, many of the respondents debate the level of involvement of players. Some mention that feedback can be unreliable; that behavioural data is more useful in informing decisions. DEV-3 talks about a difference in being proactive or reactive regarding player feedback, depending on when in the game's lifecycle it is received: "Based on this research we'll take these decisions, because we believe it will be most likely to lead to success. But then when the message is out, or the game is out, we get very reactive, because then you have to be ready for it." 14

Some respondents bring up the strong visions present in creative industries such as the video game industry. They describe it as an apparent need for the video game studio to create something they are proud of, and that it aligns with their creative vision. DEV-1 further elaborates: "Sometimes, you know, we have a vision of the game ourselves and we need to make decisions that align towards that vision which just might not be the same thing that people ...that's not their vision of the game, but it's ours, and we're the game owners".

MAR-4 and DEV-2 touch on the improved image a company might get from moving towards services. By being more close to the customer through the service, the video game developer could be perceived in a better way than if they kept more to themselves. Communicating and being open for discussions with players is also brought up by many respondents. DEV-1 mentions how the developers of the case study company has tried to be more accessible on social media, allowing players not just to discuss their opinions among their own community, but also be in direct contact with the game creators.

5 Analysis and model proposition

First of all, it is worth to note that the trend towards increased service offerings is to be considered further confirmed by the empirics. Respondents spoke of the trend/movement

¹³ "Så får de rösta in och så gör vi det. Alltså som såhär, det är väldigt basic, men liksom ju mer såna saker vi kan få in där de känner att de kan vara delaktiga i utvecklingen."

¹⁴ "Baserat på den här researchen tar vi de här besluten, för att då tror vi det här kommer ha bäst chans för framgång. Men sedan när det väl, när väl meddelandet är ute, eller när spelet är ute blir det ju väldigt reaktivt, för då måste man vara redo på det."

towards more service-based gaming in a matter-of-fact and taken-for-granted manner throughout all interviews, also when speaking of the future of the video game industry.

5.1 Components of live service(s)

When prompted for their own definition of what a live service is, and in extension consists of, respondents struggled with a clear cut, structured clarification of the practice. A couple of acronym models were mentioned, both in reference to what the case study company has structured themselves around and what their company group has identified as relevant metrics across businesses. However, no clear empirics-wide model seemed to emerge.

A thorough review of the themed and coded empirics allowed us to provide a nuanced description of the components of live services that are central to the practice. The analysis included a critical review of both sentiment, emphasis and preferences amongst the individual respondents and should display the aggregate factors accurately.

To have players both become and remain engaged in a game emerges as the goal of live services. It is said to benefit the company in many different ways, primarily as it results in revenue both directly in-game and indirectly by driving recency for a sequel or strengthening the brand name. This is done through continuously evolving and optimizing the game experience throughout its lifecycle. Identified below are the components of live service that serve to generate engagement:

5.1.1 Content

The content component of the live service seems to be the most widely used way of driving engagement. Large expansions and smaller content releases alike serve to increase engagement for the video game; establishing content as a core component of the live service.

The importance of content seems to stem from it being the most tangible way for developers to evolve the game experience through live services. Content drops were described by some respondents as "small box products"; a substantial extension of the base game, and can therefore be seen as the most direct way to add to a game experience. The addition of, for example, a new in-game tool (content) is arguably more tangible than the balancing of an already existing weapon, even though both changes impact the game experience.

5.1.2 Improvements

The continuous improvement in quality of the game emerges as another key component of live service. Developers can support a game in its post-launch phase, both in terms of pure

maintenance (maintaining server performance, bug fixes etc) and improving the game experience (tweaking game mechanics and balancing).

Opportunities to continuously improve players' experience of a game, arisen through the introduction of the internet, has given video game companies the tools and circumstances they need to continually be able to make adjustments to their game after its launch. Improvement can be likened to a hygiene factor for the live service, where the game has to be working as intended for players to be able to experience the game as intended.

5.1.3 Systems

Systems implemented in a live service can be split up into two different parts. One part of this component are the systems in place in the game that allow the developers to repurpose content in order to create new experiences in the game. This then drives engagement for players in-game, with new changes being able to be served up to players at any time.

It seems that finding ways to increase the use of these kinds of systems in the game is the future of live services. Being able to keep engagement without the need to spend resources creating additional content is a strong motivator for developing these systems.

The other part of the system-component is the ability to personalize both experiences and marketing offerings for each player. Being able to segment players in game and find out where in their engagement life cycle they are, and then presenting different content for different players creates a more optimized experience for all. This also includes making sure that game infrastructure (e.g. server matching) runs smoothly.

By knowing the characteristics of every player, a personalized presentation of content can contribute to driving engagement. A player not familiar with the game might become more engaged if presented with the right messages helping them get to know the game, instead of having to figure everything out themselves, which might lead to churning out. Infrastructural systems, such as matchmaking algorithms, also prevent churn for similar reasons.

5.1.4 Data, feedback & communication

Supporting all of the engagement drivers mentioned above are built-in systems that allow for telemetric data to be collected from within the game. The ability to use data to better understand what's happening in the game once it's launched emerges as another one of the core components to the live service practice. The usage of data is directly linked to the

personalization of the experience for each player, and what offerings are targeted to them. Without the data collected from each player, no-ingame segmentation could be made.

The importance of feedback from players was discussed as largely debatable, since feedback is said to be potentially unreliable and misleading. However, it is still described as playing a large role in providing guidance for what new content needs to be created, and what new improvements need to be implemented. Utilizing the collected feedback in junction with data quickly creates a strong feedback loop, where data and feedback are compared to build a perception of what is really going on inside the game. Coupled with all of this is the importance of reaching out to players and being more open about the development of the game. By thinking of the game as a service, there is need for relations and more direct interactions with players.

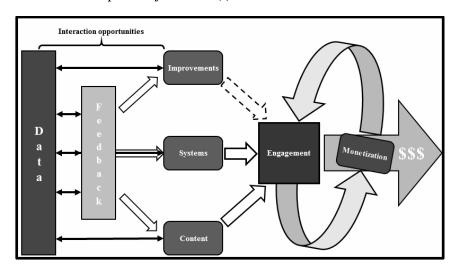
5.1.5 The link between engagement and monetization

All of the sub-components mentioned above feed into and drive engagement, which keeps player coming back and being active within the game. The importance of engagement shows itself most clearly through the link between monetization and engagement.

Most often, successful financial implications of live service(s) manifests through *monetization* that is incorporated successfully towards engagement related factors. Coupling monetization with engagement allow the companies to benefit from players being active in the game. A box-product game would primarily earn its revenue from initial sales. A service-based game with monetization further connected to engagement could earn more revenue on active players than on the sale of the game itself, for example through subscriptions or paid access to features. Furthermore, coupling monetization to player progression through the game is described as something of a best practice as it can assure that monetization becomes a natural part of the game experience. An alternative is to monetize a purely aesthetic aspect of the game, separate to its fundamental gameplay, e g through allowing visual customization of in-game avatars.

5.1.6 Component model

Model 1 - The components of live service(s)



Our proposed model of live service and its components is outlined in Model 1. While the model reads left to right most processes are to be considered continuous, highlighted by bidirectional arrows. Data and feedback are seen feeding into improvements, systems and content. Systems and content are then said to drive engagement, while pure improvements are described as mostly serving to maintain engagement (highlighted by the crosshatch arrow) as a hygienic factor, whose main purpose is to allow for the players to stay engaged. For example, while an instantaneous matchmaking process can do little to deepen player engagement, a lengthened and lagging experience can "break the spell" of a gaming session.

The bidirectional continuity displayed in the model, and the essential "back-and-forth" it represents, is especially true for data, feedback and communication, all described as loops in the empirics. Live services are evaluative by nature due to the vast amount of feedback presented by players and the abundant data theses sentiments can be tried and tested against.

Review of the telemetric data and the gathered feedback indicate which *improvements*, *systems* and *content* that the live service is to consist of, and gauge the performance of past installations continuously against new data and feedback.

5.2 Co-creation from live service(s)

5.2.1 Value co-creation and empowerment

The empirics paint a clear picture of how live services make use of and allow for the plethora of interaction opportunities that have emerged between players and companies since the

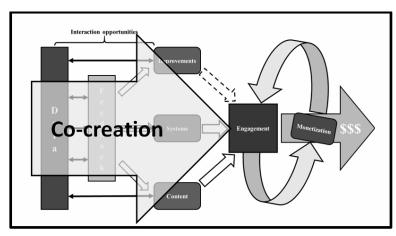
introduction of the internet, and the shift towards service offerings in games. Developers make regular note of the feedback that players leave them on forums and social media.

Grönroos is clear on how important interaction is to value co-creation, and live services seem not only to make use of the information (that these interactions result in) as a resource, but to allow for even more of these interaction opportunities. The goal of having a faster cadence in responding to feedback and updating the game is thoroughly aligned with this. This would then, due to the increased opportunities for interaction, introduce additional opportunities for co-creation of value.

Some respondents described how the case study company also makes sure that they to some extent allow core players (identified by their profile and/or influence) an even more direct opportunity to interact with the company during the development phase of the game through focus groups and exclusive testing. This would suggest that there are opportunities also for Liljedal's more direct approach to consumer co-creation. Liljedal's approach would also directly apply to the desire to involve players in selecting content that DEV-3 described.

While the consumer co-creation described by Liljedal is limited to the involvement of core players in the development process, this can in itself contribute to engagement through the feeling of empowerment it provides players that see how their feedback shapes the live services provided (e.g. through balancing of in-game tools criticised in forums). Analysis of the empirics therefore suggest that the value proposition of live services is both consistent of and driven by value that is co-created together with the players.

5.2.2 Relationship to the live service model



Model 2 - Co-creation and live service(s)

The opportunities for co-creation and their relationship to the components of our proposed live service model is illustrated in Model 2. In our proposed model for live services, co-

creation of value seem to occur throughout the opportunities for interaction that improvements, system development and content present. With every update to the game, there is an opportunity from the community to interact and give feedback. These co-creative processes therefore seem to further drive and deepen the resulting engagement that the live services provide the game.

5.3 Reasons to incorporate live service(s)

5.3.1 Financial factors

In accordance with the reasons for moving into services presented in T.S. Baines et al. (2009), financial factors emerge as an obvious instigator to the service shift through live services. As all of the respondents mentioned this as a reason, not only those in the more business-oriented side of the company (marketing, business analytics), this factor can be seen as being a main driver for incorporating live services.

In the empirics, financial factors are related primarily to revenue opportunities and rising development costs. However, whether a respondent focused on the cost or revenue aspects it seemed apparent that they were discussing two sides of the same, revenue-generating coin: for the respondents mentioning costs, service offerings were described as a source of revenue contribution to offset the effect of rising cost on profit.

This explanation is aligned with Wise & Baumgartner (1999), as it describes using a product as a platform for additional, revenue-driving services. Discussions by the respondents on the box product seem to illustrate this kind of thinking, where the base game released is seen as the foundation from where to expand service offerings, allowing for the pursuit of new sources of revenue.

The use of subscription models and monetization coupled with engagement in games aligns well with Gebauer & Friedli (2005) where services are said to provide more stable income over time as customer pay in more regular intervals, e.g. monthly.

Lastly, the deterring of the second market can be said to be linked to financial goals, as players who would have bought a game on the secondary market may have to buy the game from the video game company itself due to fewer people wanting to sell their games, resulting in increased revenue for the company.

In the live service model defined in 5.1.6. the increased revenue opportunities that live services generate align with financial reasons for servitization.

5.3.2 Strategic factors

Establishing a competitive advantage by building strong relationships with players through live services, by means of increased engagement, emerges as a both apparent and important reason for incorporating the practice. This is well aligned with Vandermerwe & Rada's (1988) thoughts on blocking out competition through servicing customers, pointing toward a desire to create a lock-in effect for the players based on the player investing emotions, time and money in a game. A player having been engaged in playing a game for a long time may view a switch to another game as difficult, since all the progress in the old game is of little to no value in the new game.

The thoughts on improving the perception of the company by closer customer-contact can also be said to create a competitive advantage. Whether the player's perception of the company can contribute to the lock-in effect or not is hard to tell, but it seems to be able to help create stronger communities around brands.

Increased engagement, a goal of live services, also has clear strategic benefits in terms of the closer ties with the player base and lock-in effects. New ways of presenting the game's inherent offerings can provide a sense of customization to the players which strengthens their commitment to both the title, brand and company in question.

5.3.3 Marketing factors

From a marketing point of view, the company-player relationships that live services nurture can be used for improving the sales of upcoming games, wholly in line with Malleret (2006). The heavy use of player data inherent in the live service practice and how this enables improvements to the value offerings, through strategic use of consumer insights, is also in line with T.S. Baines et al. (2009). The ability to validate feedback with customer data also seems to create customer loyalty and build relationships, since a company responding in a proper way to feedback will satisfy players' needs to be heard, as discussed by DEV-1 in the empirics. Similarly, shortening the time from receiving feedback to implementing the changes for players to test out also seems to be related to strengthening the relationship between developer and customer.

5.3.4 Industry factor of expectation

A factor discovered that wasn't entirely covered by the drivers of servitization outlined in T.S. Baines et al. (2009) was the effect of player expectations on the video game industry following the shift towards services and how this encouraged industrial conformity. If players

are expecting certain service elements or constant changes and evolution in a game, the developer is pressured to include them to keep players interested and satisfied. Moving together or in front of the industry seems to be a large reason for services in games, as the fear of slipping behind competitors (i e as discussed by MAR-1) forces the video game developers towards expanding their service offerings

5.3.5 Implication(s)

Review of the empirics against the combined theories around the servitization phenomenon show a great deal of compliance between the overall shift towards services through live services in the video game industry, the theoretical causes of it and how these factors are serviced through the incorporation of live services. The empirics also strengthen the notion of an industry shifting towards service offerings through live services, for a multitude of strategically related reasons, including industry specific expectations.

To incorporate live services in games should be considered a clear example of an action that shifts a company to the right on the goods-service continuum proposed by Olivia & Kallenberg (2003).

6 Discussion

6.1 Relationship of contributing factors

Our analyses and the empirics they reviewed indicate that the factors and concepts in effect are largely related to each other, supported by the fact that discussion of individual concepts in isolation is difficult. For example, when discussing drivers and motivations for increased service offerings in terms of financial reasons it seems evident that revenue opportunities are very much related to strategic alignment and/or marketing efforts to reach consumers in new (and possibly better) ways.

Whether these relationships are purely positively correlated or if there are any degrees of causation at play is very hard to discern, but would be interesting to pursue further in even more in-depth research.

6.2 Gray areas of individual definition

The semistructured interviews were conducted absent of definitions of terms such as engagement, to allow for the respondents own sentiments to emerge absent any direction imposed by a definition implied by us as interviewers. So, while respondents have mentioned

the same phrase or concept, such as "engagement", it is difficult to discern whether their individual definitions of said term are sufficiently similar to group together.

6.3 Boundaries between base game and live services

While in our research we have been separating the terms base product and live service (as most of the respondents also have done), the game's offerings might be effectively indistinguishable to players. To them, the base game and an effective live service attached to it, is part of the same fundamental experience. MAR-4 was one of few respondents that raised this sentiment: "Because live service is just an extension of the product and a consumer doesn't think: This is the product and this is the live service of the product. To them it's just the product". So, while live services is still arguably discernable as a business practice in the video game industry on a company level, the case might be different on the consumer level.

6.4 Critique and limitations

As with any qualitative research approach, the method and selection of respondents is due scrutinization as to whether the empirics are based of appropriate sources. Barring the notion that the sample of respondents could have done well with being larger, our critical assessment is that the participating professionals must be considered applicable sources. Also the fact that the case study centered around a single company should be sufficiently motivated.

The decision to pursue a mixture of grounded theory and systematic combining, and in extension both inductive and abductive methodological approaches might have affected the consistency of our analyses across research questions. Our analytical ability is likely to have affected both results and theories used.

Research on servitization has mostly focused on traditional manufacturing companies that operate business-to-business, and the theories have seen limited application towards consumer oriented business, dealing in intangible products such as entertainment products.

7 Conclusions and call for future research

7.1 Conclusions

7.1.1 What constitutes a live service?

Our analysis of the live service(s) practice resulted in a proposed model of what composes a live service and what it hopes to achieve (see Model 1).

The model describes how live services drive player-engagement in the game, which in turn drives revenue (preferably through monetization linked to in-game progress).

Engagement is in turn driven through three different components of live service: improvements, systems and content. Supporting these components is a constant loop of feedback and data from players. While it was the result of an inductive, grounded theory methodological coding of the empirics, the model still merits descriptive value of the business practice. This is especially true for the case study company, and should be applicable to some extent to the video game industry as a whole.

7.1.2 What co-creation process(es) arise from video games that have live service(s)?

The live service practice both increases interaction opportunities for, and makes use of, value co-creation together with its players. This in turn helps live services drive engagement, both by assuring that improvements, systems and content introduced is effective, and by providing a sense of empowerment to players that share their feedback with the company.

7.1.3 Why do companies in the video game industry move towards increased service offerings through the use of live services?

The review of the implied reasons for shifting towards increased service offerings through the use of live services were found to largely comply with the reasoning proposed in the theories of servitization, with an additionally descriptive factor of expectations on the industry outside the theoretical framework. This suggests that live services is one business practice through which the video game industry is going through servitization.

7.2 Contribution

This thesis has provided the video game industry with a descriptive model of what the live service practice is composed of, and what one can hope to achieve if one were to elect to incorporate live services successfully. The subsequent review of how both value co-creation and servitization relate to the live service practice should provide future researchers with a foundation from where to launch both extensions of said theories and more in-depth research of live services in video games.

7.3 Call for future research

Live services as a business practice for video game companies is still due a fair amount of research. We suggest future endeavours include a quantitative review of live services actual

effect on revenue and expand on the prospect of engagement's transition into direct or indirect monetization.

Established- and future business models could, through new research, be segmented and classified in an effort to describe what the changing practices actual mean for players and consumers. Research on this topic could possibly extend to other digital industries.

Lastly, the overall shift towards services through live services has seemingly affected managerial aspects of the video game industry. Empirics gathered, but outside the scope, of this research suggest that live services have had severe effects across staffing, company culture and corporate governance. There seemed to be a lot of indicators that this forces video game companies to attempt an overhaul of their business philosophies; a seldom painless process. For example, DEV-2 mused as to whether established actors in the industry might suffer from innovator's dilemma, and DEV-4 raised a notion of how live services serve as a creative outlet for developers. Qualitative research with managerial scope should produce interesting insights into the challenges that the video game industry faces going forward.

8 References

Ahrne, G., & Svensson, P. 2011. Akademiskt skrivande, Liber.

Anthony, R. N., Govindarajan, V., Hartmann, F. G., Kraus, K., & Nilsson, G. 1998. *Management control systems*, Irwin McGraw-Hill Boston, MA.

Arvidsson, N. 2009. Exploring tensions in projectified matrix organisations. *Scandinavian Journal of Management*, 25(1): 97-107.

Baines, T. S., Lightfoot, H. W., Benedettini, O., & Kay, J. M. 2009. The servitization of manufacturing: A review of literature and reflection on future challenges. *Journal of Manufacturing Technology Management*, 20(5): 547.

Berg, B. L. 2004. *Qualitative research methods for the social sciences* (Fifth ed.). USA: Pearson education.

Blizzard. Overwatch (official page). https://playoverwatch.com/en-us/.

Bryman, A., & Bell, E. 2014. Företagsekonomiska forskningsmetoder (Andra ed.). Stockholm: Liber AB.

Di Orio, G., Stokic, D., Matei, O., Barata, J., Scholze, S., & Cenedese, C. 2016. A platform to support the product servitization. *International Journal of Advanced Computer Science and Applications*, 7(2): 392-400.

DiCicco-Bloom, B., & Crabtree, B. F. 2006. The qualitative research interview. *Medical education*, 40(4): 314-321.

Dubois, A., & Gadde, L. 2002. Systematic combining: An abductive approach to case research. *Journal of business research*, 55(7): 553-560.

Frambach, R. T., Wels-Lips, I., & Gündlach, A. 1997. Proactive product service strategies: An application in the european health market. *Industrial Marketing Management*, 26(4): 341.

Gebauer, H., & Friedli, T. 2005. Behavioral implications of the transition process from products to services. *Journal of Business & Industrial Marketing*, 20(2): 70.

Glaser, B. G., & Strauss, A. L. 2009. *The discovery of grounded theory: Strategies for qualitative research* Transaction publishers.

Grönroos, C. 2011. Value co-creation in service logic: A critical analysis. *Marketing Theory*, 11(3): 279-301.

Handrahan, M. Critical consensus: Star wars battlefront is gorgeous but lightweight.

http://www.gamesindustry.biz/articles/2015-11-17-critical-consensus-star-wars-battlefront-is-gorgeous-but-lightweight.

Harris, T. Top 5 online gaming industry trends for 2015. http://www.internap.com/2014/12/01/top-five-online-gaming-industry-trends-2015/.

Hurtado, J. C. H., Ferras, X., Arimany, N., & Meijide, D. 2016. *Role of ICT on sustainable value co-creation in product-service systems*. Paper presented at Iberian Conference on Information Systems and Technologies, CISTI.

Keefer, J. Star wars: Battlefront 2 has taken fan criticisms of the original to heart, EA exec says.

http://www.shacknews.com/article/97902/star-wars-battlefront-2-has-taken-fan-criticisms-of-the-original-to-heart-ea-execsays.

Kvale, S. 1997. *Den kvalitativa forskningsintervjun*. Lund: Studentlitteratur.

Lanz, R., & Maurer, A. 2015. Services and global value chains: Servicification of manufacturing and services networks. *Journal of International Commerce, Economics and Policy*, 6(3).

Lee, S., Yoo, S., & Kim, D. 2016. When is servitization a profitable competitive strategy? *International Journal of Production Economics*, 173: 43-53.

Leech, B. L. 2002. Asking questions: Techniques for semistructured interviews. *Political Science & Politics*, 35(04): 665-668.

Liljedal, K. T. 2016. Communicated consumer co-creation: Consumer response to consumer co-creation in new product and service management (PhD ed.)Stockholm School of Economics.

Lincoln, Y. S., & Guba, E. G. 1985. Naturalistic inquiry (First ed.). USA: Sage Publications, Inc.

Lizardi, R. 2012. DLC: Perpetual commodification of the video game. Democratic Communiqué, 25(1).

M. Morse, J. (Ed). 1990. Qualitative nursing research: A contemporary dialogue SAGE Publications.

Malleret, V. 2006. Value creation through service offers. European Management Journal, 24(1): 106.

Marchand, A., & Henning-Thurau, T. 2013. Value creation in the video game industry: Industry economics, consumer benefits, and research opportunities. *Journal of Interactive Marketing*, 27: 147.

Merriam, S. B. 1994. Fallstudien som forskningsmetod (Första ed.). Lund: Studentlitteratur.

Metsis, H., & Kroon, J. 2016. Swedish game developer index. (Online): Swedish Games Industry.

Miller, P. What's next? how games-as-a-service is changin everything.

http://www.gamasutra.com/view/news/202407/Whats Next How gamesasaservice is changing everything.php.

Nieborg, D. B. 2015. Crushing candy: The free-to-play game in its connective commodity form. *Social Media + Society*, 1-12.

Oliva, R., & Kallenberg, R. 2003. Managing the transition from products to services. *International Journal of Service Industry Management*, 14(2): 160.

Payne, A. F., Storbacka, K., & Frow, P. 2008. Managing the co-creation of value. *Journal of the Academy of Marketing Science*, 36(1): 83-96.

Riot Games. League of legends (official page). http://na.leagueoflegends.com/en/.

Smith, A. 1904. An inquiry into the nature and causes of the wealth of nations (1776). Reprint, London: Printed for W. Strahan and T. Cadell.

Sotamaa, O., & Karppi, T. 2010. *Games as services*. www.itrim.fi: University of Tampere.

Stenros, J., & Sotamaa, O. 2009. *Commoditization of helping players play: Rise of the service paradigm*. Paper presented at Proceedings of DiGRA.

Sundin, E., Lindahl, M., Comstock, M., Sakao, T., & Shimomura, Y. 2009. Achieving mass customisation through servicification. *International Journal of Internet Manufacturing and Services*, 2(1): 56-75.

Sölvell, Ö., Fohlin, C., & Protsiv, S. 2015. *Ekosystemet ICT & digital kartläggning av styrkeområden i stockholmsregionen*. Stockholm: Länsstyrelsen Stockholm.

Tyni, H., & Sotamaa, O. 2011. *Extended or exhausted: How console DLC keeps the player on the rail*. Paper presented at Proceedings of the 15th International Academic MindTrek Conference: Envisioning Future Media Environments.

Van De Ven, A. H. 2007. Practicing engaged scholarship. In *Engageed scholarship: A guide for organizational and social research*: 260. UK, Oxford: Oxford University Press.

Vandermerwe, S., & Rada, J. 1988. Servitization of business: Adding value by adding services. *European Management Journal*, 6(4): 314-324.

Vargo, S. L., & Lusch, R. F. 2004. Evolving to a new dominant logic for marketing. Journal of Marketing, 68: 1.

Vargo, S. L., & Lusch, R. F. 2006. Service-dominant logic: Reactions, reflections and refinements. *Marketing Theory*, 6(3): 281.

Vargo, S. L., & Lusch, R. F. 2008. Service-dominant logic: Continuing the evolution. *Journal of the Academy of Marketing Science*, 36: 1.

Vargo, S. L., & Lusch, R. F. 2008. Why "service"? Journal of the Academy of Marketing Science, 36(1): 1.

Vargo, S. L., & Lusch, R. F. 2014. Inversions of service-dominant logic. *Marketing Theory*, 14(3): 239.

Vargo, S. L., & Lusch, R. F. 2016. Institutions and axioms: An extension and update of service-dominant logic. *Journal of the Academy of Marketing Science*, 44(1): 5.

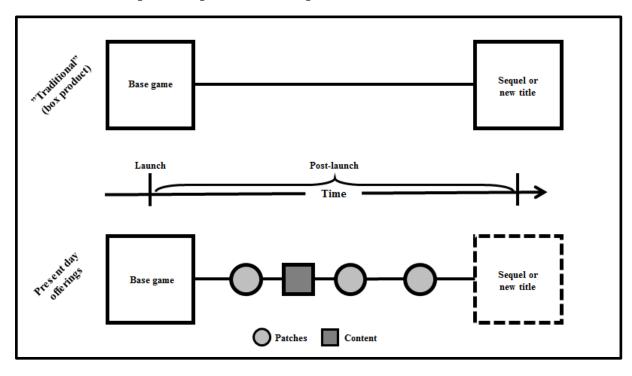
Walsh, D., & Bull, R. 2012. Examining rapport in investigative interviews with suspects: Does its building and maintenance work? *Journal of Police and Criminal Psychology*, 27(1).

Wise, R., & Baumgartner, P. 1999. Go downstream: The new profit imperative in manufacturing. *Harvard Business Review*: 133.

Ziaee Bigdeli, A., Baines, T., Bustinza, O. F., & Guang Shi, V. 2017. Organisational change towards servitization: A theoretical framework. *Competitiveness Review*, 27(1): 12-39.

9 Appendices

9.1 Illustration of past and present release practices



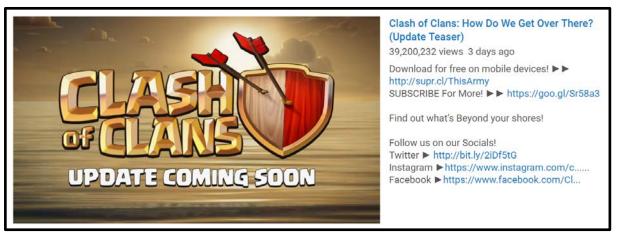
9.2 Satirical presentation of criticism of changing video game business practices¹⁵



 $^{15}\ \underline{\text{http://starecat.com/games-now-and-then-burgers-original-game-expansion-pack-dlc-content/}, 2017-05-01$

9.3 Examples of live service instalments

Update campaign, Clash of Clans¹⁶



Content and update plans with statuses, Dota 217

Incognito Mode	Toggling this setting will hide your Dota 2 Profile from other players as well as allow you to enter and use a different Profile Name. The setting will override any preferences you may have set for 'PROFILE PRIVACY' in Global Settings.	2013-09- 16	Shelved	
Rewards for Friend Recruiting		2014-03- 07	Shelved	
Community Sparkle	A sparkling effect for cosmetic items with Self-Made or Community qualities.	2014-06- 30	Delayed	Feature copied from Team Fortress 2.₺
Pregame Showcase	Camera pans over each player's hero while game is loading. Can edit movie, cosmetic items, hero poses, and display player stats.	2014-12- 17	Pending	
"Red Ghost"		2014-09- 04	Unknown	Purpose unknown.

https://www.youtube.com/watch?v=TfQc3pDBHaY, 2017-05-06
 http://dota2.gamepedia.com/Unreleased content, 2017-05-06

"Faction War" - weekly game mechanic, For Honor 18



Weekly resets of in-game challenges, Destiny¹⁹



WEEKLY RESET

https://www.youtube.com/watch?v=aa9Gifg0UKg, 2017-05-07
 http://www.xboxoneuk.com/xbox-one/news/destiny-weekly-reset-27092016/, 2017-05-07

9.4 Interview method - framework

Interview technique

- One main interviewer and one "observer" each interview, although both interviewers ought to be active in the beginning of the interview to put the subject at ease and develop rapport
 - provides opportunities for questions from a second point-of-view
 - provides focus and facilitates a conversation
 - should prove feasible to complete without interviewee insecurity
- Make propositions and state questions as free of direction/bias as possible; facilitate for the display of the interview subject's own appraisal etc
- Provide the interviewee with a choice of preferred interview language between English and Swedish
- The line of questioning is semistructured following research relevant topics, but interviewers are to focus on reactivity and adaptation to the interviewee's responses
- All interviewees are informed of:
 - non-disclosure agreements in effect
 - the fact that they will be provided an opportunity to approve their representation (through quotes)
 - their hopeful consideration if the integrity of the research and how it can be compromised through discussion within the organization
 - the fact that they are subject to possible follow-up
- All interviewees are asked to give their permission to be recorded and are informed as to how the recorded material will be handled and stored for possible review
- To the extent that it is reasonably achievable all interviews should be conducted under the same or equal circumstances in terms of location, time of day, etc. In the event that an interview is disrupted and/or postponed the interviewers should:
 - schedule a new interview slot as close in time to the first slot as possible
 - initiate the second interview with a second introduction to re-establish rapport
 - if possible, place the interview subject in the same state of mind as he/she was immediately prior to the disturbance

9.5 Semistructured questionnaire

General warm-up

- For how long have you been active within the video game industry?
- What are your responsibilities at [case study company]?
- How do companies in the video game industry categorise themselves?
- What type of segment does your company identify with?
- In the industry, our initial research suggests that [case study company] is leaning towards HD (Mobile) rather than any other segment how would you classify [case study company]?
 - What would you say have brought you to where you are today?
 - is this a position you see change in the future?
- Which companies would you classify as examples of HD-actors? Mobile-actors?
- In "gamers' terms" it is more common to speak of a segmentation spectrum ranging from casual to hardcore how would you classify your products and services in that aspect?
 - What would you say have brought you to where you are today?
 - Do you see this positioning change in the future?
- How would you classify a casual vs hardcore game?
 - In what way is this "segmentation" spoken of in the industry?
 - At [case study company]?

Servizitation

- What is the core business offering of companies in your industry?
- What is the core business offering of [case study company]?
- According to you, how important are service offerings in the video game industry?
 - IF important: WHY are they important?
- How important were service offerings in the video game industry 10 years ago?
- What type of service offerings are present in [case study company] games?
- Has [case study company] changed the way in which it's games are released?
- Does this affect the way YOU work?
 - IF yes, how?

Live-services

- Could you define live services and -events?
- How are live services developed at [case study company]?
- How are live services utilised at [case study company]?
- How important is the use of live services to [case study company]?
 - IF important: WHY are they important?
- How important have they been historically at [case study company]?
- What's your perception of how, if at all, the introduction of live services has changed [case study company's] operations?
 - How, if at all, have they affected your work?

Co-creation

- How is the development of new products and services managed at [case study company]?
 - If interviewee is directly involved, prompt for them to indulge themselves
- Would you say that there's an effort to create products and services together with customers?
 - If Yes, in what ways does this manifest itself?
- How, if at all, involved are customers in the development of new products and services?
 - for live services specifically?

Customer journey

- In what ways, if any, have the way your customers interact with your products and services changed over recent years?
 - How, if they are, are those changes the result of [case study company's] own initiatives contra trends in the video game industry?
- In what ways, if any, has these changes affected the products and services you offer?
- Does [case study company]? actively work to affect and shape the way customers interact with your products and services?
 - How?
 - Why?

9.6 Figures

Figure 1 - The goods-service continuum, Olivia & Kallenberg 2003

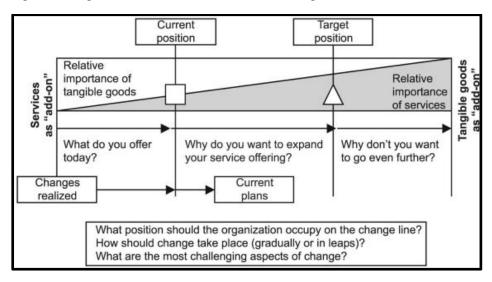


Figure 1 - Value-in-use creation model proposed by Grönroos (2011)

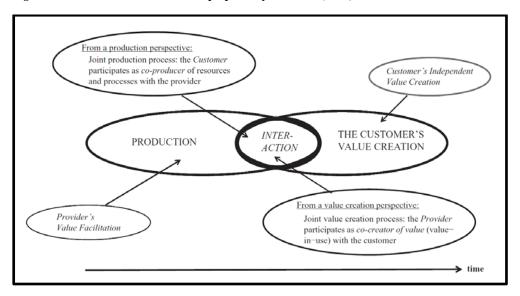
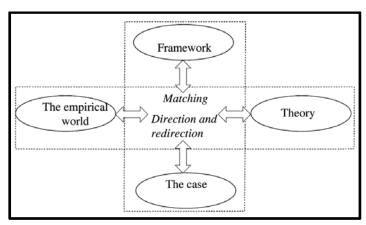


Figure 4 - Iteration through systematic combining, Dubois & Gadde 2002



9.7 Tables

Table 2. Pre-study subject

Interview subject	Company Segment	Place	Date
Brand Manager	PC/Console	Office, Stockholm	2017-02-20
Data Scientist	Mobile	Office, Stockholm	2017-02-28

Table 3. Roles and business areas of interview subjects

Interview subject	Business area	Date
Brand Manager	Marketing	2017-03-24
Senior Brand Director	Marketing	2017-03-30
Engagement Manager	Marketing	2017-04-06
Lead Analyst	Business Analytics	2017-04-06
Brand Manager	Marketing	2017-04-06
Senior Producer	Development	2017-04-06
Lead Analyst	Business Analytics	2017-04-20
Design Director	Development	2017-04-20
Brand Director	Marketing	2017-04-20
Senior Producer	Development	2017-04-25
Associate Game Designer	Development	2017-04-25