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Building a Customer Value Proposition for a Game Analytics Company

Helsinki Metropolia University of Applied Sciences

Bachelor of Engineering

Industrial Engineering and Management

Thesis

12th May 2017

Helsinki Metropolia University of Applied Sciences

Authors Title Number of Pages Date	Erno Kiiski & Wilhelm Voutilainen Building a Customer Value Proposition for a Game Analytics Company 61 pages + 2 appendices 12th May 2017
Degree	Bachelor of Engineering
Degree Programme	Industrial Engineering and Management
Specialisation option	International ICT-business
Instructor	Anna Sperryn, Senior Lecturer

This thesis was carried out for a game analytics company to improve their customer value proposition by identifying the needs of different user segments of their service and finding out how the service can provide value to fulfill these needs. The first objective of the thesis was to identify the needs of the user segments inside the game developer companies; designers, analysts and management. The second objective was to find out compatibility between the service and user segments' needs. Third objective was to visualize the different user segments' needs, relevance of each need and the compatibility between the case company's service and customer needs.

The research was carried out through individual interviews and a workshop. The core of the knowledge base for this thesis consists of theories about segmentation, targeting, positioning (STP) and value propositions. As a support for the core theories, more specific theories about the context were studied.

The outputs for this thesis were Value Proposition Canvases and tables for each user segment visualizing 1) what their needs inside a typical game development company are, 2) how the case company's service fulfills those needs and 3) which of them are important to tackle based on their relevancies.

Canvases and the tables acted as a proposal which the case company can use in support for sales as they give clearly visualized points to be used as sales hooks to point out the value in the service for different segments. It describes what gain creators and pain relievers should be emphasized when selling the service to specific segments. Proposal can also be used to support the development of the service to meet the customers' needs even better.

Keywords	Value Proposition, SaaS, analytics, games industry

Tekijät Otsikko Sivumäärä Aika	Erno Kiiski & Wilhelm Voutilainen Building a Customer Value Proposition for a Game Analytics Company 61 sivua + 2 liitettä 12.5.2017
Tutkinto	Insinööri (AMK)
Koulutusohjelma	Tuotantotalous
Suuntautumisvaihtoehto	Kansainvälinen ICT-liiketoiminta
Ohjaaja	Lehtori Anna Sperryn

Insinöörityö tehtiin pelianalytiikkayritykselle parantamaan sen arvolupausta asiakkailleen. Työssä identifioitiin eri asiakassegmenttien tarpeet pelianalytiikkapalveluja kohtaan sekä selvitettiin, kuinka juuri tämä palvelu voi tarjota arvoa eri asiakkaille. Insinöörityön ensimmäinen tavoite oli kartoittaa eri käyttäjäsegmenttien tarpeet pelinkehittäjäyritysten sisällä. Näihin sisäisiin segmentteihin kuuluivat pelisuunnittelijat, analyytikot sekä johtotason henkilöt. Toinen tavoite oli löytää ja kartoittaa, miten nämä tarpeet sekä kohdeyrityksen palvelun tuoma arvo kohtaavat. Kolmantena tavoitteena oli visualisoida eri käyttäjäsegmenttien tarpeet tärkeysjärjestyksessä, sekä se, miten kohdeyrityksen palvelu kohtaa nämä tarpeet.

Tutkimus toteutettiin tekemällä yksittäisiä haastatteluita ja työpaja kohdeyrityksen johdon kanssa. Insinöörityön teoriapohjan ydin muodostui STP-teoriasta (segmentation, targeting, positioning) sekä arvolupausteoriasta. Näitä teorioita tukemaan tutkittiin myös tähän kontekstiin liittyvää teoriaa.

Insinöörityön lopputuotoksena olivat Value Proposition Canvas sekä taulukko jokaiselle segmentille, jotka visualisoivat 1) mitä tyypillisessä pelinkehitysyrityksessä olevien käyttäjäsegmenttien tarpeet ovat, 2) miten hyvin kohdeyrityksen palvelu täyttää nämä tarpeet sekä 3) mitkä tarpeista ovat tärkeimpiä taklata.

Kohdeyritys voi hyödyntää lopputuotoksessa visualisoituja faktoja myynnin tukena. Lopputuotoksesta voidaan nähdä, mitä eri palvelun arvoa tuottavia asioita on hyvä painottaa, kun palvelua myydään eri segmenteille. Lopputuotosta voidaan myös käyttää kehitettäessä palvelua vastaamaan paremmin asiakkaan tarpeita.

Avainsanat	arvolupaus, SaaS, analytiikka, peliala

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1 Introduction

To be successful in business, products and services have to meet specific customer needs and give some specific value to customers. If a company can offer enough value to the customers through their products and services, they are willing to buy what it is offered. This act of offering value to the customer through the product or service is called value proposition. It can be referred to as the heart of strategic marketing plan for business. (McDonald, et al. 2011) Value propositions are basically a summary of what products or services the company offers and what value they are creating and why these should be bought more preferably than the possible alternatives. (McDivitt and Wilkinson 2012).

Comprehensive view of customers and their needs and pains is the core for creating an effective value proposition. There are few different models and tools that can be utilized to create an effective customer value proposition. In this study, Alex Osterwalder's Value Proposition Canvas (2014) is used.

1.1 Key Concepts

The key concepts in the thesis are the following:

Value proposition is a statement of how company's product or service would give value to customers and why they should buy it. Value proposition tells how some particular product or service will add more value to the customers than other similar products or services.

SaaS (Software as a Service) is the service model of the case company's product. SaaS is a whole application that is delivered as a service in the cloud via Internet for the customer. The most common way SaaS providers deliver the service to the customer is a web browser-based user interface that can be accessed on any device that is connected to the Internet.

KPI (key performance indicator) is one type of performance measurement. KPIs are used to measure some particular activity that organization is engaging in. It demonstrates how a company is performing in achieving some key business objectives.

IAP (In app purchases) are purchases that are made inside a mobile application using real money. This could mean, for example, virtual currency or items that are used in a mobile game and purchased with real money. Usually mobile games that have IAP's in them use the free-to-play business model.

Free-to-play (F2P) business model is nowadays the most commonly used business model in successful mobile games. Players can download and play the game's core for free. The idea of the business model centers around players' willingness to use money to purchase, for example, in-game items once they have tried the game and its mechanics out. Monetization is made usually through advertisement or in-game purchases.

Game analytics is way of using different data of games to maximize its success in the game market. Nowadays analytics is used more and more commonly in the game industry, and it has become crucial part to ensuring games' commercial success. It allows game developers to understand in real-time why users are abandoning a game and to identify other players at risk of leaving the game so that they can develop player retention strategies before those players quit. Analytics can help the developers to tweak the game and increase retention and engagement metrics significantly through user data. Analytics can also be used already in the production phase of a game to get fact-based data to support the design process.

Feature implementation means putting new features into a game. New features that are implemented into a game could be, for example, new game modes or social features such as playing with or against friends and other players. Even when a mobile game is launched, they must be kept up-to-date by balancing the game and adding new features in order to remain competitive and attract players because the mobile game market is constantly evolving.

1.2 Case Company Background

The case company of this thesis operates in the mobile games industry. It offers data analytics services mainly to game companies, publishers and investors. Company was

founded in early 2014 in Helsinki, Finland. Its customer base already spans all over the world, so it can be said that the company was born global. The main service the company offers is an online service (SaaS) that gives insights on the current mobile game market and helps the customers optimize their games to increase their commercial potential. In addition to the online service, it also offers consulting services for its customers.

1.3 Business Challenge

Currently the case company has identified the three main customer segments; game developers, publishers and investors. The actual business challenge is related to the game developer segment. Inside game developer companies, the case company has identified distinct roles and users and has separated them into three main user segments; designers, analysts and management. These user segments all have various kinds of needs for the service, and this also means that same sales strategy does not work for every user segment.

The business challenge is that it has been noticed that the different needs of the user segments are not identified well enough leading to mediocre value propositions that could be improved. It is hoped that a further identification of the needs would help in the sales process when approaching the potential customers, improving the service's value proposition to fit the customers' needs better and give tools to offer even better targeted services for the different user segments inside the game developer companies.

1.4 Objective and Scope

The first objective of the thesis was to identify the needs of the user segments inside the game developer companies; designers, analysts and management. The second objective was to find out the compatibility between the service and the different user segments' needs. The third objective was to visualize the different user segments' needs, relevance of each need and compatibility between the case company's service and those needs.

The outcome of this thesis is a Value Proposition Canvas and table for each user segment, visualizing the different user segments' needs inside a typical mobile game development company. The table also shows how the different features of the case company's

service fulfill these specific customer needs and which of them are the most important to tackle based on their relevance.

1.5 Benefits

The value proposition canvases and the tables visualize the needs of the different user segments and the compatibility between the different features of the case company's service. This enables the case company to form a comprehensive view about the state of their current value proposition.

The case company can use the tables as a support for developing the service and positioning it for different segments. It can also be used for developing sales strategies, to offer even better targeted services and as a general support for sales personnel.

This support and knowledge gained will help in approaching customers, which can contribute to increasing sales and conversion rates for sales meetings. It can also help in product development since case company's view on what customers really want could possibly strengthen so that it can focus on developing the product that covers exactly these needs.

1.6 Structure of the Thesis

This thesis is written in 6 sections. The first section provides the introduction to this thesis and focuses on creating a clear picture about why this thesis is done and what the benefits of it will be for the case company. The second section describes the methods and materials used in this study, focusing on how the research was designed and conducted. The third section focuses on describing the current state of the case company's value propositions to different segments. The fourth section is the theory part which focuses on segmentation, targeting, positioning (STP) and value proposition theories and additionally supporting theories that include personas, SaaS theory, mobile game industry and the role of analytics and the game designer segment. The fifth section presents the proposal for the case company, which covers outputs of the thesis and how they were formed. The sixth section is the conclusion part where the whole thesis is summarized and its process and outcome evaluated.

2 Method and Material

This section explains the methods and materials used in the research of this study. The research focuses on mapping and improving value propositions, so the research methods are defined based on that context.

2.1 Research Approach

The research approach used in the study is qualitative, meaning that the research is carried out through individual interviews. The questions asked are specific and open ended, which lets individual opinions be spoken out and allows the research team to dive deeper into the problem. Interviews were split into two phases; case company interviews and the user segment interviews.

In the first phase, case company managers were interviewed to form the current state analysis. Questions were about the level of current customer segmentation, the current identification of the needs of the different segments, how current value propositions are communicated to different segments and the state of the sales process. The questions were open ended to get all the information needed and to let opinions stand out. All the case company interview questions and answers are presented in the Appendix 1.

The second phase of the interviews was conducted after the current state analysis and conceptual framework were done, to gather data for forming the proposal of this thesis. This part focused on interviewing the customer companies' user segments; designers, analysts and management. Personnel inside these segments were interviewed individually either on Skype or in person. Each user segment had similar questions; for example, about their normal workday, their aspirations in their work and the pains and risks they encounter. Customers were also interviewed on what benefits they get from the case company's service and on what kind of expectations they have for analytics services in general. As a support, these same questions were presented for the case company's managers also to get their view from the service's side, hear their experiences working with these segments and because customers do not always recognize all of their pains and needs. These interviews were crucial for forming the proposal, since knowing cus-

tomers' pains and needs comprehensively is the core for creating effective value proposition. All the user segment interview questions and answers are presented in Appendix 2.

Additionally, a workshop with the case company's managers was conducted after all the other data for the proposal was gathered and analyzed from the current state analysis, conceptual framework and the user segment interviews. The main objectives for the workshop were to validate and finalize Value Proposition Canvases, to create tables to visualize the fit between different user segments' needs and the service and to ensure that the proposal meets the needs of the case company.

Table 1 below summarizes the different phases of the research:

Table 1. Different Phases of the Research

Research phase	Target	Topic	Ideal results
CSA Interviews	Case company's managers	Current state analysis	Data about current state of the case company's segmentation, customer need evaluation, value propositions and state of the sales process
User segment interviews	Customer companies	Identifying customer pains and needs	Comprehensive data about different segments' pains and needs
	Case company's managers	Identifying customer pains and needs from the service's view	Supporting data about different segments' pains and needs that did not come out in the user segment interviews
Workshop	Case company's managers	Validating and finalizing the proposal and the fit between customers' needs and the service	Validated and finalized value proposition canvases and tables for each segment visualizing the fit between customers' needs and the service

2.2 Knowledge Base and Research Design

The core of the knowledge base for the thesis consists of theories about segmentation, targeting, positioning (STP) and value propositions. As a support for the core theories, more specific theories about personas, SaaS theory, mobile game industry and the role of analytics and the game designer segment were studied to understand the specific context of this thesis. Research design for this thesis is visualized in Figure 1 below:

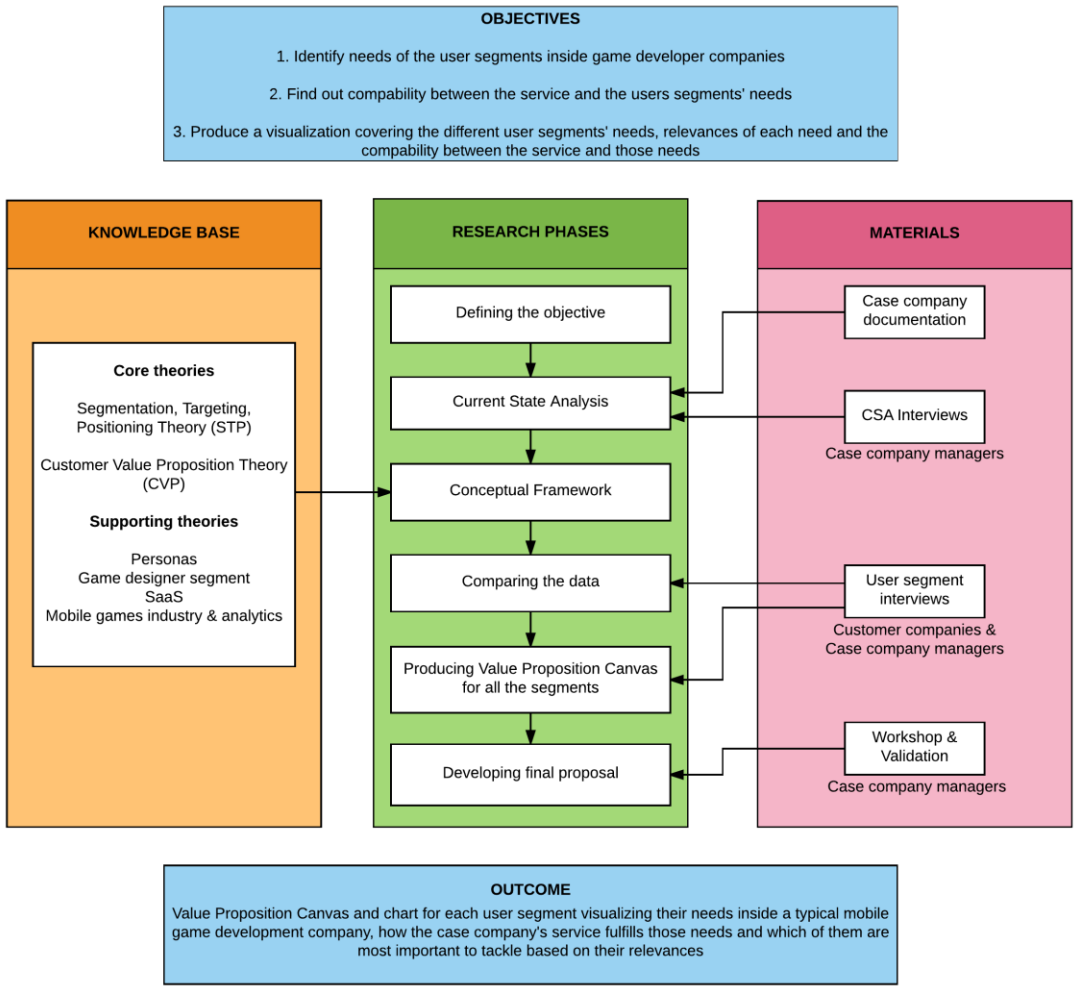

Figure 1. Research Design

The research phases of the study as shown in the Figure 1 are described in more detail below:

Firstly, the objectives of the study were defined in co-operation with the case company's managers. The goal was to create as clear definition as possible since it is the foundation of the study.

Secondly, current state analysis of the case company's current level of segmentation and the identification of the needs of the different user segments, the way the current value propositions are communicated to different segments and the state of the sales process were studied. Interviews that were conducted with the case company's managers and the case company documentation worked as a material for this research.

Thirdly, conceptual framework study was done, where core theories Segmentation, Targeting, Positioning Theory (STP) and Customer Value Proposition Theory (CVP) were studied thoroughly to get an understanding of the best practices. To create fitting value propositions for this context, supporting theories, such as personas, SaaS theory, mobile game industry and the role of analytics, and the game designer segment, needed to be studied.

Fourthly, a comparison based on the conceptual framework study, current state analysis and the user segment interviews was done so that the Value Proposition Canvases could be created.

Fifthly, Value Proposition Canvases were created to illustrate how the service and the different needs of the user segments meet. Material for these canvases consists of conceptual framework, current state analysis and the user segment interviews.

Finally, a workshop was held with the case company's managers. The main objectives of the workshop were to validate and finalize the Value Proposition Canvases and to create tables to visualize the fit between different user segments' needs and the service and to ensure that the proposal is fitting for the needs of the case company.

2.3 Data Collection

As shown in Figure 1, theoretical data and knowledge about the context was gathered from literature covering segmentation, targeting, positioning (STP), customer value propositions and specific supporting theories. The data used to conduct this thesis has been collected through the case company's documentation, case company manager and user segment interviews. All the data collected have been integrated in a workshop with the case company's managers to form a Value Proposition Canvas for all different segments, which then was used to form the final proposition tables.

2.4 Data Analysis

The data analysis was mainly done by comparing theoretical data to practice. First, the theories were studied, and then, a conceptual framework for the context of this thesis

was built on the basis of these theories. The practical part of the data was gathered from the interviews and from the documentation provided by the company.

3 Current State Analysis

This section describes the current state analysis of this thesis to get a view of the case company's current level of user segmentation, the identification of the needs of the different user segments, the way the value propositions are communicated to different segments and the state of the sales process. The data for this section was gathered by interviewing the case company's managers and from the case company documentation.

3.1 Case Company's Product

The case company operates in the video game industry especially focusing on the mobile game market. Its main product is an online service (SaaS), which offers processed data of the current market situation with easily accessible graphs, trends and other insights instead of just raw data. The whole service is based on hundreds of game analyses in which around 150 distinctive features are tracked. Then there is a statistical model which is used to calculate a KPI which indicates the game's feature set's potential to be financially successful in the current market. Besides just getting the market data, the service can also be used to measure customers' own games' feature sets all the way from concept phase to post launch phase, for example, to determine which concepts seem to be solid and have good chances to be profitable. Market is evolving all the time and trends change over time, so the service provides help for the companies to track where their games are going and what should perhaps be implemented in the upcoming updates to stay relevant.

The service offers a lot of customization options for the customer to choose which tools and features they want to use in their service. They can get choose for example to get the market data, own games' analyzer, data about soft launched games or implementation picture service which can help you figure out how to implement some exact feature. Customers can customize their own packet by choosing the tools they want.

3.2 Current Segmentation

Case company's customer base consists of game developer companies, investors and publishers. This study focuses on the segments inside the game developer companies, so the first interview round with the case company's managers focused on that area.

Currently, the case company has identified three different segments inside the game developer companies; game designers, data analysts and management. The personnel of the company have experience in the mobile games industry, so the identification comes mainly through the company's knowledge and by working with the customers. The case company's managers think that the level of segment identification is moderate and improving that would help on value proposition communication. Lately, the company has started to focus more on the subject; for example, partner organizations' have been used to test features of the service to find out opinions and preferences of different user segments before launching them into the actual product.

Documentation level of how to communicate value propositions for different user segments is low as currently only an internal company feedback channel has been used to gather and document feedback from the customers. The case company's managers think there could be a more centralized place for all the documents, which could help in giving a clearer picture for approaching customers in every case. Low level of documentation leads to weaknesses in the sales strategy, which will be discussed more below in the next section.

3.3 Current Sales Strategy

During the first interview with the case company's managers it was found out that currently they have specific personnel responsible for approaching each segment. This is done because the blockers are different for different segments. For example, when the company has a client where the contact point will be an analyst they use the person responsible for the statistical model. This is because they have found out that analysts trust data and numbers. If that data is proven to be trustworthy and right, then it is fairly easy to convince them about the value proposition the service offers when approached with the data and statistical model in front. The service really helps analysts in many pain points as well. Their job mainly revolves around making reports from the data to help decision making of designers and management. From the service, they can get, for example, csv-files straight away and lots of data to help them in their daily work.

Management level has probably been the easiest segment to approach in the case company manager's opinion. Managers are usually not constant users of the service. They

use it more rarely to get a good overview of the company's game portfolio and to get support for their decision making on questions such as which game concepts to approve. They are also usually the persons who are most interested in the money and the profits the games make so that is why this kind of service has been fairly easy to sell to them. They usually see the value in the service quickly and they usually would like to get it for their teams to use even though they are more rare users themselves. They get quick and clear overview with metrics and KPIs on their own games which helps them to follow games' performance and supports big picture decision making.

The common way in the industry has been before that the management just have to trust designers' opinions on what concepts are good and what are not. With the service, they can get transparency already on the concept phase with respect to which projects really have chances to become successful and profitable and which ones are most likely big risks. The problem has been that often even when the managers like the service, they are not the primary daily user group, so they do not make the purchase decision alone. They ask designers' and analysts' opinions because they would be the daily users, so in the end designers and analysts are the segments that always have to be won over.

On the basis of the interview, at the moment the clearly hardest and the most problematic segment to approach and sell to has been the designers. Case company's managers described them often to be "artistic personalities". They treat their games "like their babies". Designers might see this kind of optimization analytics service as a threat to their creativity, and they do not see the value the service would provide to them since it is basically a mathematical model. Therefore, they would need more introduction to the service and to be assured that it is just one tool to support the decision making. It is not some machine that tells you exactly how to design your game. Many designers focus often on small details and on day-to-day tasks. They try to find answers for these from the service, but it is not meant for answering to those tiny details. The case company's managers told that designers often think about just the needs of that exact day and that is why they overlook the big picture benefits.

According to the case company's managers, designers often have also a shorter attention span than analysts and designers are very often not bothered to go through the instructions. This has led to misunderstandings since they have used the service wrong or have not found a way to solve their problems and thought that the whole service does not work and therefore is not worth the money. If this point is reached, it is hard to go

back anymore to the “starting point” and still make the sale happen. Mobile games industry is still fairly young and that is why a lot of decisions are made on a “hunch feeling”. Designers like to often trust more just on their own feelings than using numbers and statistics to help them. When approaching designers, they need to be assured that the person selling is someone who knows a lot about games and the game industry. The trust comes from them seeing that the person doing the sales actually understands games and how they work.

One big problem with designers also is that they are not so homogeneous a group as, for example, analysts often are. Some of the designers are more data-oriented than others and some are guided more by gut feeling. But it is hard to know what kind of designer there is on the other end before the actual sales meeting or call. If this could be somehow identified beforehand it would help in choosing the right approach to communicate the value proposition properly.

Another problem has also been that commonly people working as data analysts, who understand the service the best, have had problems to convince the ones making the feature level development choices (designers) to change their approach. This trend has been changing though as the market is maturing and the competition is getting tighter all the time. More and more companies have been changing their development processes to more data-driven approaches.

3.3.1 Current Sales Process

In Figure 2 the sales process is visualized in high level. There was no documentation of this in the company, so the process figure was formed based on the interview data and our own knowledge of the company.

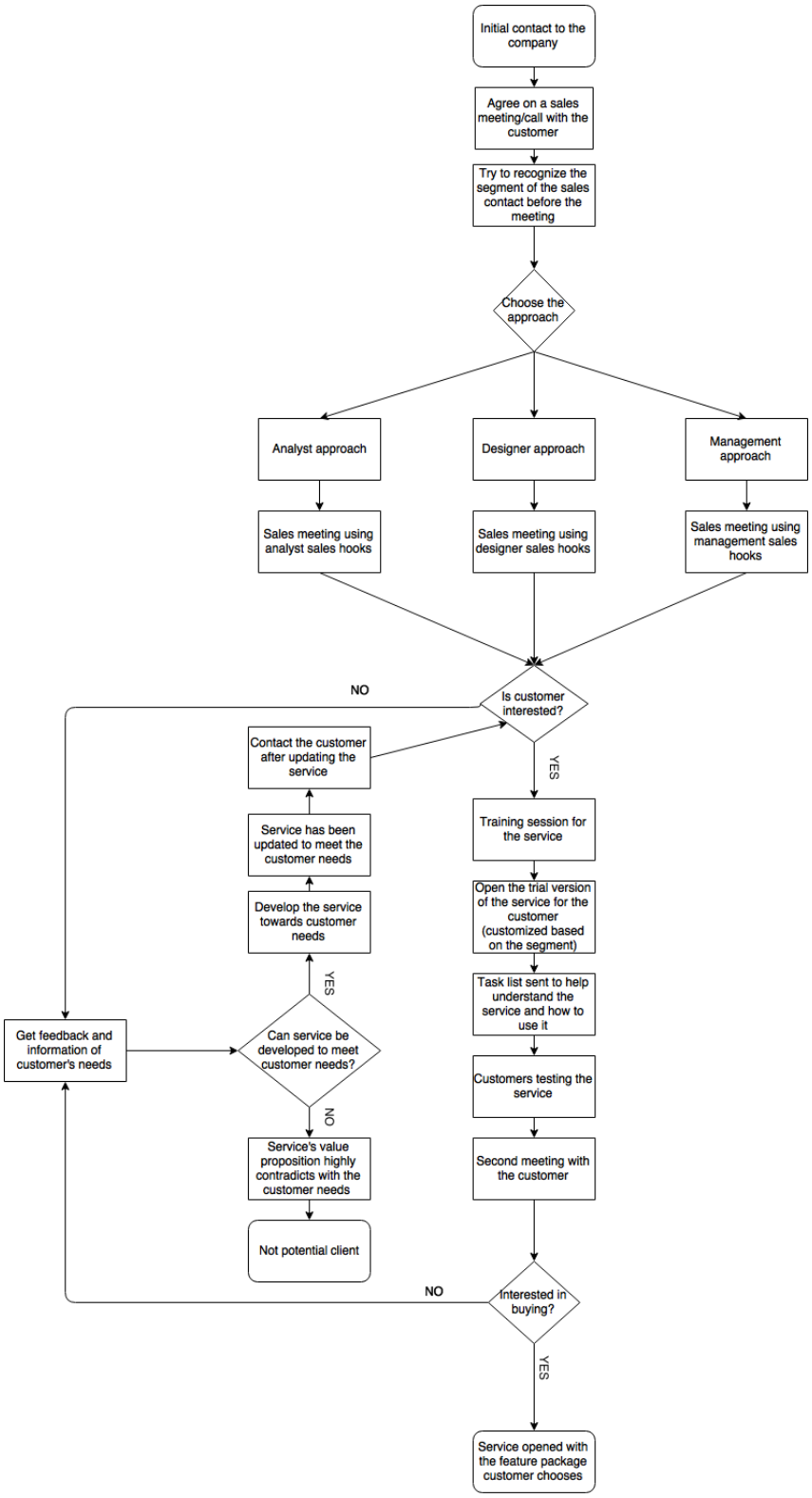

Figure 2. Sales Process

Figure 2 shows that the sales process always starts in the same way. The company is contacted in some way. After that, the initial meeting or the call is planned. During this

phase and after that the company tries to determine what user segment the person coming to the sales meeting represents. The company has made three different sales approaches for all the segments. The sales hooks differ for different segments based on the previous experiences of these segments, but there is no documentation for this. Next, the initial sales meeting or the call is held. If the customer is impressed, then a training session for them is held next. There a person from the company goes through the service with a customer and trains them on how to use it properly. When the, customer knows how to use the service right, a trial version of the service is opened to them so that they can try it on their own. A task list with the service is also sent with common use case tasks in order to train them in using the service even better and to minimize misconceptions. After customers have tried the service, it is time to have another meeting. If they are still interested, then it is negotiated that what features from the service they want to have and what kind of total package they are willing to get. In the end the service is opened with the chosen package, and customer relationship management takes over.

If the customer is not interested in the service in any phase of the process, feedback is gathered on what could make them interested. If the service can be updated towards the customer's needs, the customer is contacted again when the requested features are available. If the value proposition contradicts highly with what customer would want, the customer relationship is usually ended. The information of all the customers stay in the CRM-tool the company is using for possible retries in the future.

3.4 Conclusion: Strengths and Weaknesses of the Current Segmentation

The current state of the segmentation is rather mixed, different user segments are identified, but the needs and pain points are not completely defined and the documentation of it is lacking. Lacking definition and documentation leads to problems in the sales process, for example, in using the right approach and the right way to communicate the value proposition for each customer.

Sometimes the recognition of the type of the customer before the first sales meeting has been lacking, which has led to using the wrong approach for the particular customer. This weakness could possibly be minimized even more through better documentation of segmentation, which allows easier segment recognition.

The sales strategy when approaching the analyst and management segments is proven to be working, and they have been fairly easy to convince of the value proposition, due to analysts trusting the data-driven analytical service and management seeing the benefits of the service quickly. Although approaching the management segment has been working, they often do not make the buy decision alone, but let analysts' and designers' opinions influence heavily on the decision, since they would be the frequent users of the service.

For the designer segment, which has proven to be the most important to win over due to their high influence on the buy decision, the sales strategy is not working as well as it should. Problems have lain, for example, in them misunderstanding the product which then leads to a bad user experience and, in the end, to missed sales opportunity.

One of the weaknesses has also been addressing especially the designers' pains with the tools of the service. Additionally, even though the service would address their pains, assuring the customers of the benefits that the service gives has been problematical due to the difficult nature of the designer segment. Designers easily see a service that is based on a mathematical model as a threat to their creativity when designing a game. Addressing analyst and management segments' pains seems to be a strength compared to the designer segment, since approaching these segments have been working fairly well, although improvements could be made.

The strengths and weaknesses that were revealed in the current state analysis are summarized in a Table 2 below:

Table 2. Strengths and Weaknesses of the Current Segmentation

Strengths	Weaknesses
Different user segments are identified	Different segments' needs and pain points not completely defined
Communicating value propositions for analyst segment is proven to be working fairly well	Lack of documentation for communicating the value propositions & sales strategy
Communicating value propositions for management segment is proven to be working fairly well	Not recognizing the type of the customer before sales meeting
Addressing analyst and management segments' pains with the service	Problems in communicating value propositions to designer segment

User testing of features of the service before launching them into the product (to ensure quality and fit for the users' needs)	Addressing designer segment's pains with the service
	Designer segment sometimes sees the service as a threat to their game rather than benefit
	Assuring users of the benefits of the service

Alleviating the weaknesses of defining different segments' needs and pain points and the lacking documentation for communicating the value propositions and sales strategy is the focus of this thesis, as they were included in the objectives. Fixing these two weaknesses also mitigates the other weaknesses mentioned in the table above.

As can be seen from the table, many weaknesses are related to the designer segment. It has proven to be difficult to convince this non-homogenous segment about the value of the service. Designers often having high influence on the buy decision increases these weaknesses. It is also good to notice the weakness of assuring users of the benefits of the service, which means that the problem might not be that the service does not offer value but that it is just not communicated in the right way. Fixing the lacking documentation would support the communication of the value propositions for each segment, and this could lead to increase in sales conversion rates.

The strengths are related to the analyst and management segment as sales for these segments is working fairly well, due to the strength of addressing analyst and management segments' pains with the service. Also, the value propositions of the service have been able to be communicated better than for the designer segment, but there still could be improvements to be made.

It is worth to mention that the attitude towards analytics is changing in the industry, meaning that all the segments and the whole game development process is moving towards a data-driven analytical approach. This can be seen as a significant opportunity for the service and for the whole business of the company.

4 Literature Review and Best Practices

As for the theoretical background of this thesis, the focus is on segmentation, targeting, positioning (STP) and value proposition theories because they support the objectives of this thesis. In addition, supporting theories were researched because they are needed to understand the context of this specific case. These include personas, SaaS theory, mobile game industry and the role of analytics and the game designer segment.

4.1 Segmentation, Targeting, Positioning

Segmentation, targeting, positioning (STP) is a three-step model for building a marketing plan and is one of the most common marketing models used today. Popularity of this model is rather new and it differs from older models in a way that it focuses more on the customer than on the product. For example, 1950s marketing strategies were more product focused. Figure 3 below illustrates the STP model and how customer segments are considered first before the product positioning. (Hanlon 2016)

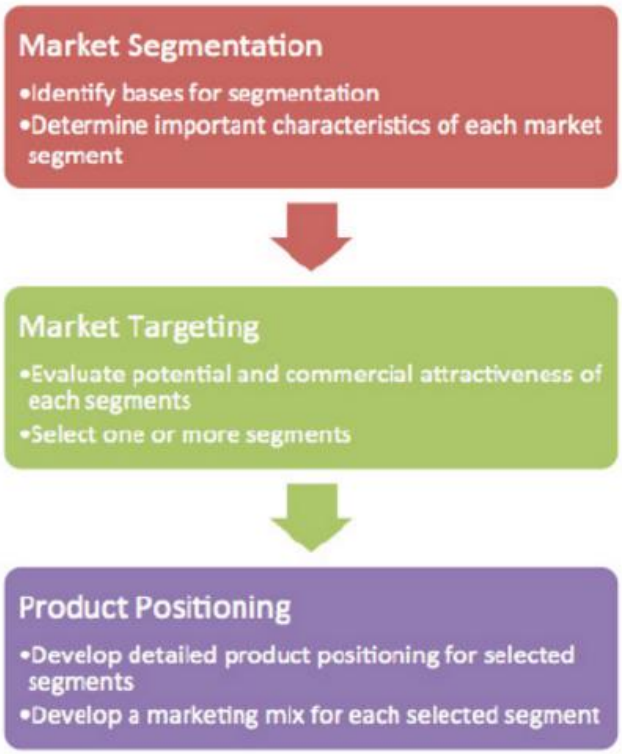

Figure 3. STP Model (Hanlon 2016).

As shown in the Figure 3, there are three different stages in STP. The first stage is segmenting the market into groups or segments, based on different factors such as customers age, gender or geographic area. (Gilligan & Wilson 2009). The second stage is targeting, which means evaluating the market segments and choosing which of the segments to focus the marketing strategies on. (Dibb & Simkin 1996). The third and final stage of STP is positioning the product, brand or organization so that it meets the needs of the customer. (Gilligan & Wilson 2009). In the next subsections, the three stages are explained in more detail.

4.1.1 Segmentation

Market segmentation means dividing the market into groups or segments. It can be divided based on many different factors and these factors can be split into four main methods; demographic, geographic and geodemographic, behavioral and psychographic segmentation. To segment a market effectively, often more than one of these methods have to be used. (Gilligan & Wilson 2009)

In demographic segmentation, markets can be divided in many different demographic groups, for example, age, family life cycle, sex, income, education, occupation, religion, race, and family size. Demographic segmentation is rather easy to use and reliable method, due to its data being available and easy to interpret, and purchasing behavior often corresponding with it. (Gilligan & Wilson 2009)

Geographic segmentation divides markets into different groups based on geographical areas like countries, regions or cities. It can be chosen to target one or even all of the geographical areas. If many geographic areas are chosen, the company must be aware that some modifications are often needed to be made to the marketing mix for the different geographical areas to address the differences of their preferences. (Gilligan & Wilson 2009) Geographic segmentation becomes useful when the locations of the marketing of a product vary because purchasing behavior is different for customers based on where they live or work. (Gunter & Adrian 1992). Though geographic segmentation does have its limitations since it does not give a complete view of customers' buying motives as it is only location based. (Gilligan & Wilson 2009). Because of this, geographic segmentation has been combined with demographic segmentation, which is called geodemo-

graphic segmentation, to enhance the view of customers' buying motives. Geodemographic segmentation divides markets based on comparison of the customer's geographic area and their occupation to more efficiently predict its behavior. (Gunter & Adrian 1992)

Behavioral segmentation is based on behavioral measures such as attitudes, knowledge, benefits the buyer is looking for, loyalty and usage rates. Most important of these is probably the benefit segmentation, as it is the most known and used. Benefit segmentation divides the market based on benefits that the customers are looking for in a product. (Gilligan & Wilson 2009) One way of conducting behavioral segmentation is creating user personas, which is discussed more in section 4.2.

Psychographic segmentation divides markets based on factors such as attitudes, values, opinions, interests and lifestyles. (Pickton & Broderick 2005). Psychographic segmentation is often used when demographic and geographic segmentation do not provide view on customer behavior efficiently enough. Psychological profiles enhance the view about of the behavior of the targeted markets, in addition to the more general factors such as age or area. (Gunter & Adrian 1992)

4.1.1.1 Segmentation in B2B Markets

Segmentation in B2B markets is different when compared to segmenting consumer markets, since businesses behave differently to consumers. Some of the main differences that are needed to be taken into account are listed below:

- B2B markets' purchase decision making is more complicated; as for consumers, the purchase decisions are often made by just one or few persons while in businesses there can be many different stakeholders influencing on it.
- Consumers make the purchase decision easier due to the fact that they usually purchase what they want when businesses purchase more based on the actual need for the product.
- B2B products are more complex as they are often tailored for the customer's needs, while consumer products are not so often.
- There are fever number of customers in B2B market, so the importance of a single customer and the customer relationship rises. (Hague & Harrison 2017)

The most common approach for segmentation in B2B markets is democratic segmentation, which when used in B2B context is sometimes referred to as firmographic segmentation. It divides the market based on, for example, the customer company size or on the importance of the customer for the future of the business. Company size, for example, is a quite reliable segmentation method since customer behavior between small and large companies is so much different no matter the business area. However, this kind of general democratic approach may not offer a competitive advantage, so, for example, a need based segmentation can be used. Need-based segmentation can, nevertheless, be more challenging to use since it is not as easy to track. Need-based segmentation is useful because for example in services, some customers might want all the features of the service while others just part of it at a low cost. Both types of customer cannot be treated the same way to fully satisfy them. (Hague & Harrison 2017)

4.1.2 Targeting

The next step in STP after the way of segmentation has been chosen is targeting. It means choosing which and how many of the segments to approach and direct the marketing strategies at. There are three different marketing strategies for targeting that the company may choose from: undifferentiated marketing, differentiated marketing and concentrated marketing. The decision of which or what combination of these strategies to use should be based on which and how many segments the organization is targeting and also on certain factors related to the market, product and competition. These factors are for example market homogeneity, market trends and environment, customers' needs, organizations resources and the nature of the competition. (Dibb & Simkin 1996)

Undifferentiated marketing strategy is when the market is targeted with the same marketing plan. The organization using this strategy does not consider the different needs of the of the different customers, but the similarity in their needs. The strategy can be relatively cost-friendly as resources are not needed to be used for developing multiple marketing plans. Weaknesses in this strategy may occur if there are differences in the customer needs, which might lead to a bad customer satisfaction as it can be difficult to meet every customer's needs. (Armstrong & Kotler 2005)

Differentiated marketing strategy is an opposite to the strategy mentioned above, as in this strategy, a different marketing plan is tailored for each segment. Obviously, this strategy works better when there is notable differences in customer needs, but this strategy also comes with higher costs, as resources are needed to be used for developing these different marketing plans. (Armstrong & Kotler 2005)

Concentrated marketing strategy means putting the marketing focus on few or just one of the segments. This strategy is beneficial when the customers' needs are clearly known and when there is knowledge of which segments are the most important ones for the business. This is a more riskier strategy due to the fact that it can be noticeably profitable when done right, but also dangerous for the business if the focus is on the less beneficial segment. (Armstrong & Kotler 2005)

4.1.3 Positioning

When the organization has identified the segments, and chosen which to target, it is time for the third step in the STP process, which is positioning the product, brand or organization. Goal of positioning is to stand out from the competition and give the customer segment a reason why they should buy the product or choose the brand, by positioning it so it meets their needs and expectations. (Gilligan & Wilson 2009)

Positioning approach gives guidance about locating the organization's brand in the customer's mind. It is about communicating with the customer about what the product is, how the product differs from other similar products and why they should choose the product. Positioning is done based on the organization's or the products' strengths and weaknesses, and also on the strengths and weaknesses of the competitors. For example, if the organization notices that the competitors have a weakness that no one of them is filling a certain need of the customer, which would be a hole in the market, the organization could position the product that way that it would fill this need. (Ries & Trout 2001)

In other words, positioning is about identifying the competitive advantage in the organization's product or brand and communicating this to the customer in the right way. Often organizations are capable of identifying the competitive advantage but fail on the communication part. There are three different positioning errors causing organizations to fail on communication with the customer: over-positioning, under-positioning and confused

positioning. Over-positioning means that the organization is over-promising and under-delivering its product to the customer, which leads to many hindrances such as customer unsatisfactory and customers seeing the product as expensive and invaluable. Under-positioning means that the message communicated to the customer is too undefined, so the benefits and difference from similar products are not seen even though it might be there. Confused-positioning is somewhat similar to under-positioning, but it is more about giving the wrong message to the customer, which leads them not having clear idea about the product or what the organization or brand stands for. (Gilligan & Wilson 2009)

4.2 Personas

In the current state analysis, it was found out that the designer segment might not be that homogenous a group. To tackle this problem, theory about personas was chosen to be researched to diversify the segment.

Personas are one way of doing behavioral segmentation, which was discussed in chapter 4.1.1. It helps in understanding how the users behave, think and what they are trying to achieve. They are not real people, but composite archetypes based on the behavioral research on the real people and their goals. (Cooper 2003)

When creating a product, it is of course important to satisfy your target audience. Logic might tell you to widen the features as much as possible to accommodate as much people as possible, but this way of thinking is actually flawed. The best way is to design for specific types of individuals with specific needs. Many products are designed to satisfy too broad audience which leads to lower satisfaction overall. The key is to choose the right, the most important individuals and their goals and needs first. These individuals need to be prioritized so that their needs are met without compromising the ability to meet the needs of secondary users. Cooper gives a good simplified example in his book on how personas are useful. By designing different products for different people with different needs, the satisfaction of the users will get better. Personas help to determine what a product should be and how it should work. Persona goals are the foundation on what the product design should be based on. (Cooper 2003)

4.2.1 Constructing Personas

Creating personas can be divided to seven steps. The first step is identifying distinct behavioral variables that came up during the research. Usually these can be, for example, activities, motivations, attitudes and skills. The next step is to map the wanted users/subjects to different behavioral variables. After mapping, a clear behavioral pattern should be identified. Users that cluster in multiple behavioral variables represents a behavioral pattern. This form the basis of a persona. Next, the data for all the behavioral patterns needs to be synthesized. The most important detail to synthesize are the goals. Identifying the logical connection between different personas and users helps in figuring out the goals that lead to those behaviors. The next few steps are basically tweaking the descriptions of the personas and expanding the descriptions. The last step is designating the persona types and prioritizing them. (Cooper 2003)

Personas can be utilized in creating customer value propositions, which are studied in the next section.

4.3 Customer Value Proposition

This section gives an overview on what customer value proposition means and how efficient value propositions can be created. In this study, Osterwalder's Value Proposition Design (2014) and its canvas are used as a base, and it will be expanded with other literature areas

4.3.1 Definition of Customer Value Proposition

There are several different definitions for customer value proposition to be found from the literature. Osterwalder et.al's (2014) state value proposition simply as a description of the benefits customers can expect from your products and services: what value does your products or services give the customer so they want to pay a certain amount in exchange for them? According to Barnes et.al's (2012) value proposition is "a clear, compelling and credible expression of the experience that a customer will receive from a supplier´s measurable value-creating offering."

Michael Skok (2013) defines value proposition as "a positioning statement that explains what benefit you provide for who and how you do it uniquely well. It describes your target buyer, the problem you solve, and why you're distinctly better than the alternatives".

4.3.1.1 Definition of value

Value can mean very different things to different people. Some people value for example the price of some specific product over some other features. For example, someone wants just simple, easy to use mobile phone. They usually value the price over the wide feature set that the phone can do. They choose cheap basic phone because it is more valuable solution to their problem than expensive high-end mobile phone. Mullins et. al describe value as “a function of intrinsic product features, service and price, and it means different things to different people”.

Grönroos & Helle (2010) have taken a bit different and broader view. He says that the customer is actually a co-creator of value as, instead of the value being just something concerning products or services, value is ultimately formed when the customer is consuming them.

4.3.2 Building Customer Value Proposition Using Value Proposition Canvas

Building a customer value proposition is an effort to create explanation on why a customer should buy exactly your solution instead of some other competitor’s solution. What value you can bring to the customer in return of their investment. There are few different models that can be utilized in order to create an effective customer value proposition. In this study, Value Proposition Canvas (2014) is used.

Osterwalder’s Value Proposition Canvas is expanding the basic business model canvas value proposition to gain even better understanding of the customers and the products/services they want. The primary objective of the Value Proposition Canvas is to assist in developing a value proposition that sees customers’ pain points and tells what kind of pain relievers company can offer to solve them and what needs to be done in orders to achieve them. It helps companies to understand the patterns of value creation, to leverage the experience and skills of the workforce and helps avoiding wasted time with ideas that won’t work in the end. It zooms into the details of two of the building blocks of the business model canvas: value propositions and customer segments as Figure 4 shows. (Osterwalder et. al. 2014)

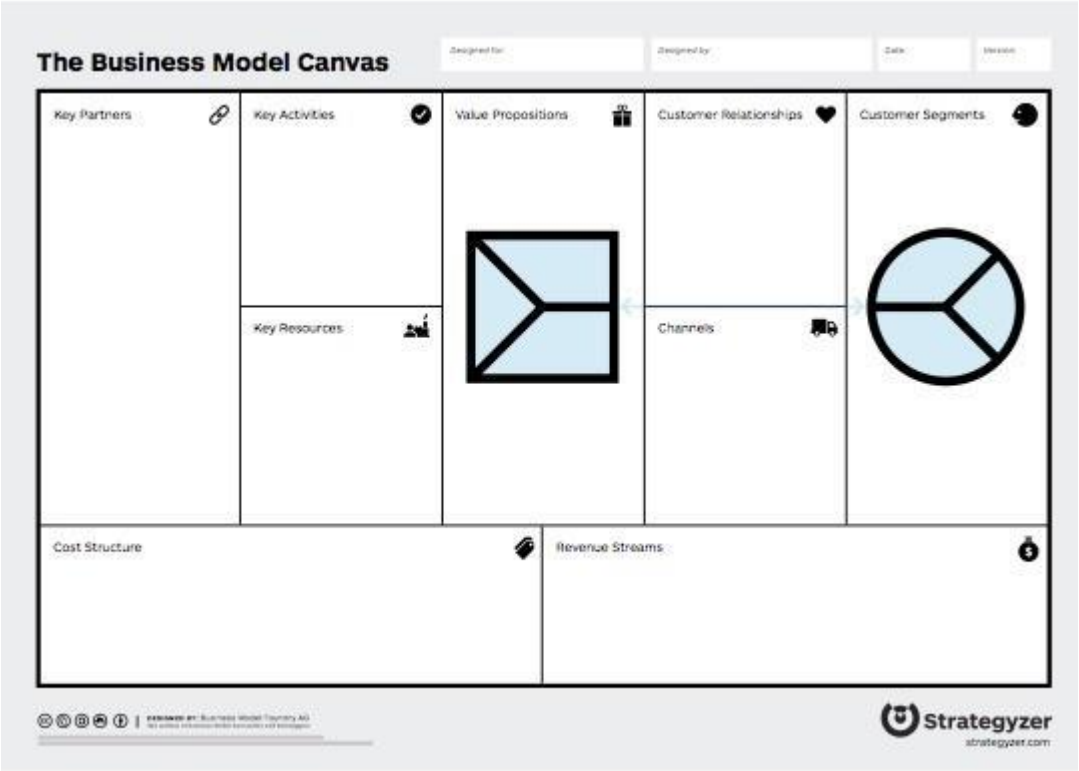

Figure 4. Building Blocks Used for Value Proposition Canvas (Osterwalder et.al. 2014)

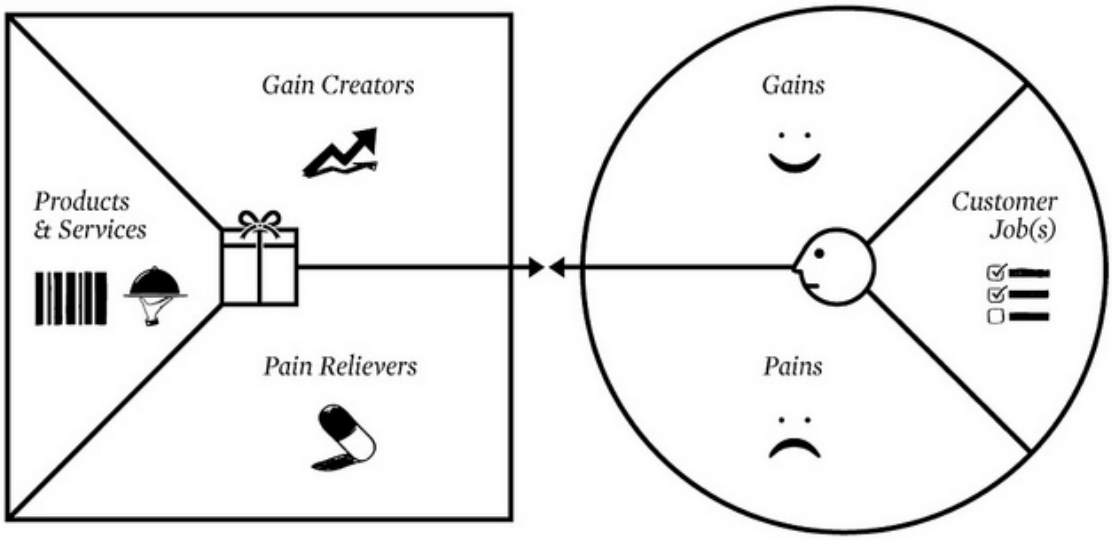

Figure 5. Value Proposition Canvas (Osterwalder et.al. 2014)

As can be seen from Figure 5, Osterwalder's Value Proposition Canvas forms from two different building blocks: value map and customer profiles. The idea of the canvas comes from matching these two blocks together. You have to observe customers in order to find out customer profiles. It describes a specific customer segment in more described way.

After mapping the customer profile, a value map is created to figure out how your company can create value for the customer in the detailed way. The ultimate goal is to find a fit between these two blocks. (Osterwalder et.al. 2014)

4.3.2.1 Customer Profiles

Customer profiles is divided in the three sections. The first to be mapped is *customer jobs*. They describe the things the customers are trying to get done in their work. It includes for example tasks that they are trying to complete, problems they are trying to solve or needs to be satisfied. (Osterwalder et.al. 2014)

The second part of the customer profile is *customer pains*. They describe anything that annoys customers regarding their job. It describes undesired outcomes, problems and characteristics, obstacles in their jobs and risks related to the jobs if they go badly or are not completed at all. In order to help discovering customer pains, some trigger questions can be used, for example, what gives them headaches in daily work, what is missing from the current value proposition, what features they are missing or what are the main difficulties they encounter. (Osterwalder et. al. 2014)

The last section of the customer profiles is *customer gains*. It describes the outcomes and benefits that customer wants from the solution. Gains can be categorized in four different segments. Required gains are gains that are absolutely required and without them the solution would not work. A good example for these is the ability to make calls with a smartphone. It is an essential requirement when concerning buying a phone. Then, there are expected gains which are something that are expected, but the solution will work without them. For example, the design of Rolex watches. It is expected to look good, but it is not required necessarily to make it work. Next, desired gains are something that customers think go beyond basic expectations but they would love to get them. These are the gains that usually customers will tell you if you ask them. These are the gains that usually evolves on existing solutions and give customers new value. The last segment is unexpected gains which are something that go beyond expectations and desires. These gains are usually something very innovative that the customers cannot even think they would get from this kind of solution. Osterwalder gives a good example of the App Store with phones. Nobody really thought it as a possible part of a phone before Apple brought it smartphones. (Osterwalder et.al. 2014)

According to the model, it is also very important to rank the customer preferences based on their importance. Jobs need to be investigated to determine which of them the customer considers important or insignificant, what pains are the biggest and which ones more moderate, and which gains are the essentials and which are just nice to have features. This helps to understand the priorities in which to concentrate the most. It is crucial when designing value proposition that really addresses the thing that customer cares about. (Osterwalder et.al. 2014)

4.3.2.2 Value Map

Value Map is also divided in three different segments. The first one is *products and services*. It is simply a list of what the company offers. It can be thought in a way as the company's shop window. It is all the products and services that company offers and on what the value proposition is built on. (Osterwalder et.al. 2014)

Second segment is *pain relievers*. They are formed based on the customer pains that have been mapped before. Pain relievers describe how your products and services can help customers tackle specific pains. They outline explicitly how the company's offering can help to ease or remove the pain altogether. It is important to remember that it is not necessary to come up with pain relievers to all possible customer pains, because it is usually nearly impossible. Focus should be only on few pains that are handled and taken care of well. (Osterwalder et.al. 2014)

The last segment for the value map is called *gain creators*. It is basically the counterpart of the *customer gains* segment from the customer profiles. Gain creators describe how your products and services create customer gains. It tells how the company intends to produce those outcomes and benefits that the customers are expecting, desiring or would even be surprised of. Each of the gain creators have address at least one or even more pains or gains from the rest of the figure. (Osterwalder et.al. 2014)

4.3.2.3 Fit

What you want to achieve from the Value Proposition Canvas is *fit*. It means basically that customers get excited about the value your products or services are offering. The

value map must address pains and gains from the customer profile. This is visualized in Figure 6. However, it is good to remember that all the pains and gains are usually pretty impossible to reach. That's why rating the relevance/importance for all the pains and gains is crucial. In the end, it is the customer who is the judge of that will your products or services offer enough value to justify the costs for them. (Osterwalder et.al. 2014)

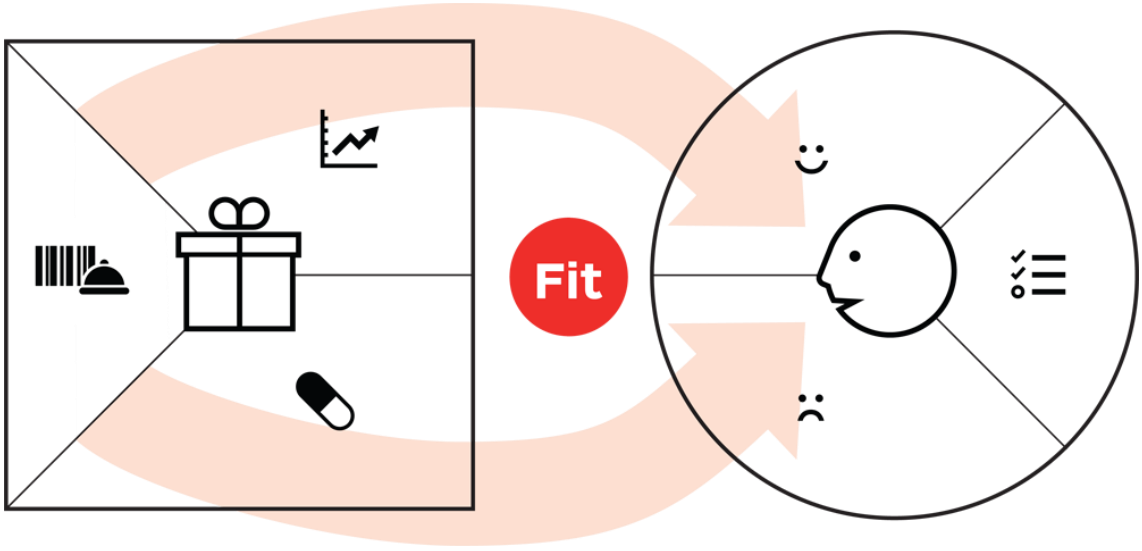

Figure 6. Achieving Fit with Value Proposition Canvas (Osterwalder et.al. 2014)

There are three stages in achieving fit. The first stage happens on paper at early phase while prototyping different value propositions and trying to find the one fitting the customer profile the best. It is called *problem-solution fit*. At this phase, there is not yet any hard evidence on does the customer really care about your value proposition. The fit exists still only in paper and the next step will be to provide evidence for that this exact value proposition works in action. This stage is called *product-market fit*. In this stage, different value offered is being validated. Some of the ideas may not be giving value to the customer after all. This phase is a long iterative process, and the value proposition may need to be designed multiple times again. The last stage is *business model fit*. In this phase, you have to find a way to fit your proven value proposition into a profitable business model. No matter how good your value proposition is, it needs a solid business model to provide value for the organization itself. When your value proposition is embedded into a profitable and scalable business model, both customer and the organization itself are gaining value for making the transactions between them. That is the end-goal that organizations try to reach with their value propositions. (Osterwalder et.al. 2014)

4.4 Game Designers

In this section, the job of a game designer is studied to get a better understanding of the game designer segment, which arose in the current state analysis as most problematic user segment, due to it being difficult to approach from sales perspective. It is important to understand the role, responsibilities and challenges of a game designer in a game development company in order to solve the problem and improve from the current state.

4.4.1 Role of Game Designer

Designers role in a game development company is to create a concept of a game. The concept works as proposal that lists details of a game, such as its target audience, requirements and budget. Designers job is also to devise very detailed information of the game which can include, for example, plots and storylines, characters, difficulties, user interface design and methods for winning and losing the game, basically all the information that is needed for the development team to create the game. (Sokanu 2017). Often game designers are not given totally free hands when designing a game, but the core elements like budget and timescale are defined beforehand and the designers job is then to figure out how to create best possible game using the defined elements. Most games are developed to be market-driven, meaning that the most crucial factor in their design is making a profit, so the business model of the game has to be taken into consideration as well. (Creative Skillset 2017)

Larger companies usually have a design team, which consists of designers and lead designers. Designers are usually assigned to focus on a particular area of the game. These could be split into two main categories; game mechanics designer and environmental designer. Game mechanics designer's role is to make sure the game and its rules are balanced, while environmental designers create different scenarios of the game. Lead designer's role is to coordinate the team, have the responsibility of both internal and external communication and have the last word when making important decisions. (Sokanu 2017)

4.4.2 Design Process

Even if the designer is not given totally free hands on the design for the game, he or she will still usually have to come up with an idea to begin the designing process. Coming up with a good innovative idea of a game can be difficult, as there is no fast rule about how to come up with one. It is recommended that when having difficulties coming up with a truly original idea, to look at already existing and working games and adding something new to them. Designers often play and test extensive amounts of games, both successful and unsuccessful, to see what works and what does not. (Lecky-Thompson 2008)

When the idea is clear, it needs to be made more concrete by refining the idea and turning it into an initial design. Designers do this by setting the basic rules for the game and enhancing the core gameplay. This initial design defines key areas for the game such as level design, game characters, game environment, game dynamics, narrative elements and backstory and unlockable items or objects. (Lecky-Thompson 2008)

The initial design is then used to convince the game development team or the game development organization that the game is worth taking forward into development. If the design is accepted, the game designer will create a design document. Design document covers the elements and ingredients needed to develop the game, for example it defines all the game's functionality, art and animation assets. Design document is referred by the whole development team throughout the process of developing the game. After the design document is created, the designer will continue working in the project by instructing the team and keeping the document updated. Design documents commonly require updating during the development process due to technical and production decisions and changes made during the development process. (Creative Skillset 2017)

4.5 Software as a Service

In this section, the concept of software as a service (SaaS) is studied in general, its benefits for the customers and its business model. It is important to understand SaaS and SaaS products that provide analytics because it is the main product that the case company of this study is providing for its user segments.

4.5.1 What is Software as a Service?

Software as a service (SaaS) is one of the three cloud service models, which also include Platform as a service (PaaS) and Infrastructure as a service (IaaS). (Kavis 2014). SaaS represents the largest cloud market in this category and is still growing. (Apprenda 2017).

Software as a service is basically a whole application that is delivered as a service in the cloud via Internet for the customer. The SaaS provider handles everything concerning the delivery of the service or the product, including infrastructure, application logic and deployments, performance, security, scalability and privacy. All that the customer has to do is to configure some parameters depending on the SaaS application and manage the users. (Kavis 2014)

The most common way SaaS providers deliver the service to the customer is a web browser-based user interface that can be accessed on any device that is connected to the Internet. Some providers also offer a second delivery method, which is providing APIs (Application Programming Interface) for the customer which makes integrating features to other SaaS solutions they are using or to their existing applications possible. (Kavis 2014)

Different SaaS solutions can be split into four main categories:

- Enterprise business applications like customer resource management (CRM) and enterprise resource planning (ERP)
- IT infrastructure solutions for dealing with for example security and monitoring
- Productivity applications that includes tools like collaboration, development and surveys
- Data applications that include business intelligence, data visualization, dashboards and data mining (Kavis 2014).

Biggest benefit of SaaS is that it allows the customer to outsource all applications, features and services outside of their core business. Buying these applications and running them locally is expensive compared to the SaaS applications and would require the customer to do many non-value-adding tasks in order to keep the service running, such as managing the servers and the security. All the resources spent on running these applications locally could be spent on developing the actual products inside the core business of the customer and for other value-adding projects. (Kavis 2014)

4.5.2 SaaS Business Model

Business model for SaaS providers is usually that they generate revenue through the customers paying for subscription fees that renew on a monthly or yearly basis. Many SaaS providers have a tiered model for the service, where the amount of the monthly or yearly subscription fee depends on the subscription package the customer chooses. These different subscription packages have different rights for the service, for example, the minor packages might not have all the features of the service unlocked. There can also be differences in user capacities and other usage limitations like number of customers in customer relationship management tool. (Croll & Yoskovitz 2013)

SaaS providers often offer a free version of the service, which is more of a limited trial version. For example, Dropbox gives its users some storage for free and then encourages users to pay for a paid subscription when the free capacity is used. This is done by many SaaS providers because adding customer to their SaaS adds almost no incremental cost for them. (Croll & Yoskovitz 2013)

Some SaaS providers charge the customers for bandwidth, compute cycles or consumption and storage basis, but nowadays these are mostly limited to the two other cloud service models, Platform as a Service (PaaS) and Infrastructure as a Service (IaaS). (Croll & Yoskovitz 2013).

4.6 Mobile Game Industry and the Role of Analytics

In this section, a quick overlook to the mobile game industry is taken, how it was born and what it looks like today. The role of analytics and it's rise in importance in the industry is also studied.

4.6.1 History of the Industry

Mobile games as an industry is relatively young compared to many other industries and even to a traditional game industry. It can be tracked down all the way to the invention of the mobile phones, but traditionally the birth of the mobile games is considered to be Snake, which was launched by Nokia for their mobile phones in 1997. (Wright 2016)

Back then the market was totally different from the market what it is today. There was no Internet for mobile phones and the games were not that widely available. Games came pre-installed with the phones and there was not really a way to sell new games. Then something called Wireless Application Protocol (WAP) came around. It was the first bigger revolution on how new mobile games could be sold for the consumers. WAP enabled consumers to have a connection to Internet with their mobile phones. It was basically a small web browser that enabled phones to connect to a server and download data to the devices over Internet. WAP essentially created the early ecosystem that allowed game developers to sell their games over Internet to the customers. It was a revelation that would eventually help mobile game industry to grow into a billion-dollar business. (Wright 2016)

The innovation that really kicked off the mobile game industry in a big way was of course the smartphones. The first iPhone was released in 2008 and with it came also the revolutionary App Store. It changed the business model of purchasing mobile games through online stores. App Store was a much more advanced version of WAP's game selling and providing capabilities. It made publishing and buying mobile games so much easier. Of course, the devices got also much more powerful which allowed game developers to make more graphically visual and better games as well. (Alex I. 2011)

The most used and successful business model also changed with smartphones. Free-to-play model became the most successful business model. Game developers adopted SaaS approach familiar from other industries to the mobile game market. GaaS (Games as a service) model was born. (Loureiro 2016). Players can download and play the game's core for free. The idea of the business model centers around players' willingness to use money to purchase for example in game items once they have tried the game and its mechanics out. Monetization is made usually through advertisement or in-game purchases. (Techopedia 2017)

As smartphones brought constant Internet connection to mobile devices, it enabled game developers to collect enormous amounts of data as well. Data analytics started to grow in importance in mobile game development. As games became free to download, it became increasingly more important to know how to handle the user data in order to be successful. (Loureiro 2016)

4.6.2 Analytics in the Mobile Games Industry

As the industry is maturing the role of the analytics become all the time more important. As smartphone based free-to-play mobile games have been around for a while, it has become increasingly difficult for the game developers to get the attention and revenues they are heading for. A lot of things have changed since the first smartphone games came out. Free-to-play model allows users to download as many games as they want without paying any money and device memory is not usually such a concern anymore so downloading new games without a second thought is common. The application market is also very oversaturated nowadays. There are thousands and thousands of applications to choose from so it has become increasingly difficult to stand out from the masses. (Herman 2017) Competition is tougher than ever, and that is why analytics is more and more important way for finding competitive advantage.

It is said that the most important metric concerning free-to-play mobile games is retention. It is crucial to build a relationship to the players and keep them returning to your game. The most successful free-to-play games create long-term relationships with the players. When players get invested in the game, they are also more willing to make in-game purchases to gain some advantages. After all repeat purchasers generate most of the average free-to-play mobile games' revenue. (McCalmont 2015) Analytics allows game developers to understand in real-time why users are abandoning a game and identify other players at risk of leaving the game so they can develop player retention strategies before those players quit. (Chulis 2012). Analytics can help the developers to tweak the game and increase retention and engagement metrics significantly by following user data and making data-driven decisions based on them. (DeYoung 2016). Analytics can also be used already in the production phase of a game to get fact-based data to support the design process.

4.7 Conceptual Framework

In order to reach the objective of this thesis, it is important to study and understand the existing theory and best practices that support it. It was chosen to focus on segmentation, targeting, positioning (STP) and value proposition theories and make them a core theory of this study, since they support the objectives of this thesis. In addition, to understand the context of this specific case supporting theories were studied. All of this theory formed a conceptual framework for this thesis, which is illustrated in a figure below:

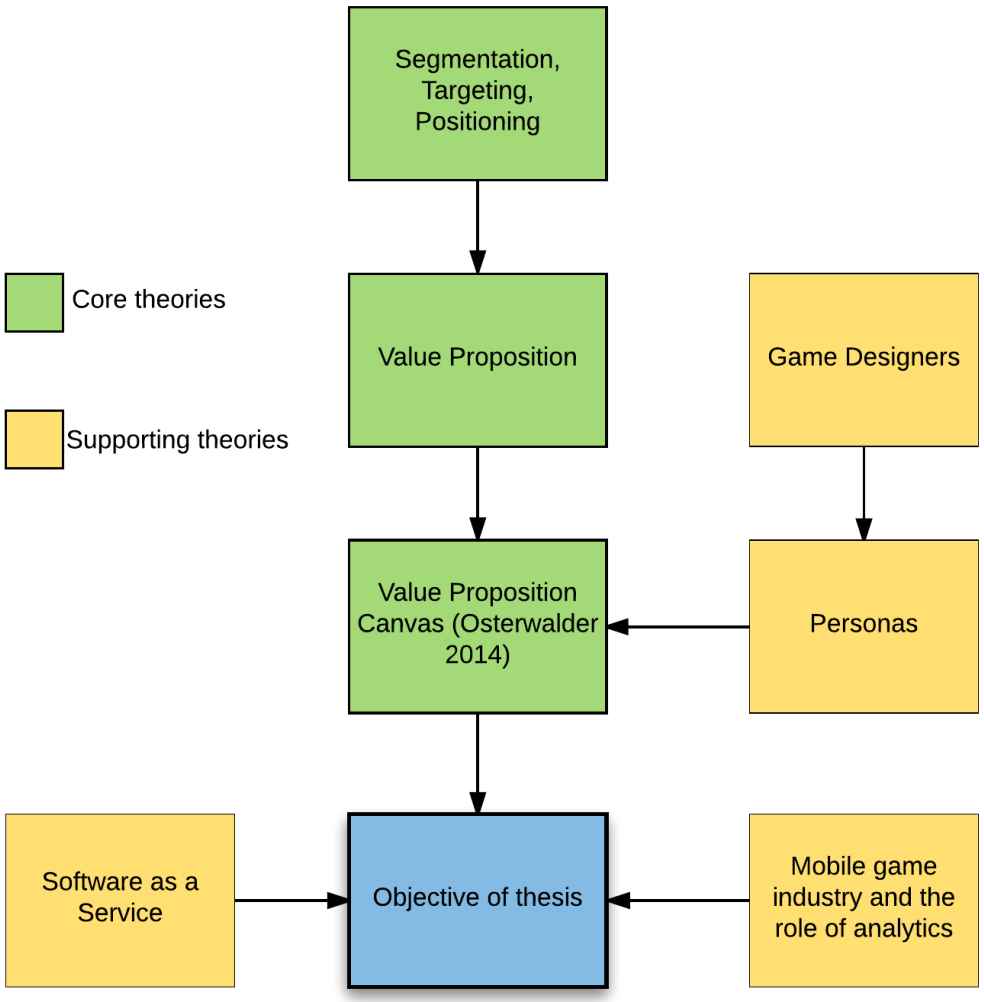

Figure 7. Conceptual Framework

4.7.1 Core Theories

Creation of conceptual framework was started with studying of segmentation, targeting, positioning (STP) theory. It gave good insight about segmentation and its different phases, which was important to understand due to the business challenge revolving around segmentation. It was found out in the current state analysis that the case company had problems in approaching some of the customers, due to them not realizing value of the service. According to theory about STP, this could be because of not being able to communicate the product's value well enough to the user segments. Additionally, STP gave insight on positioning approach, which gives guidance for example about communicating with the customer about the benefits of the product, how the product differs

from competition and why they should choose it. Customers not realizing value of a product could be also linked to under-positioning, which is according to the STP theory, a common error in positioning caused by too undefined communication about the product to the customer so they do not see the benefits, value and differences to similar products.

It was also found out in the current state analysis, that the user segments were known, but the segments' needs and pain points were not completely defined and the documentation of that was lacking. Value proposition theory was selected in order to get useful insight about mapping customer needs and pain points and creating fitting value propositions. Studying value propositions was started with basic theory and definitions, which gave understanding of the concept and guidance on creating effective value propositions.

Because the case company's documentation was lacking and one of the objectives of this thesis was to create a visualization covering the different user segments' needs and how the service fits to those needs, it was discovered that Osterwalder's Value Proposition Canvas would be perfect solution. Alex Osterwalder's Value Proposition Canvas is basically an expansion for the business model canvas. The primary objective for the Value Proposition Canvas is to assist in developing a value proposition that sees customers' pain points and what pain relievers the company's product/service could offer them. It is formed from two building blocks: value map and customer profiles. First, the company has to track the customer segments' jobs, pains and gains, and after that, they have to map their own products/services and the value/gains they would give to the customers. Due to nature of the problems that company has had in impressing some segments, it was figured that creating Value Proposition Canvases for each one of them would help the company to find new angles to the sales process. As the case company is operating in B2B-market, it is also important to remember that there are always several stakeholders that have influences on the company's decision making. Company should be aware of all of the stakeholders and how they should be accounted for in creating process of the value propositions.

4.7.2 Supporting Theories

In order to create a fitting value propositions for this specific context, some more theories related exactly to this case had to be researched to support the core theories. These

supporting theories consisted of game designers, personas, SaaS products and mobile game industry and role of analytics in it.

Current state analysis revealed that the most problematic user segment was game designers. There were problems in communicating the value of the product for this segment, due to its difficult nature. Game designers are often seen as artistic personalities that see analytics as a threat to their creativity in designing games and overall the whole segment is quite non-homogeneous. Because of this the game designer segment was researched more thoroughly by studying the role, responsibilities and challenges of game designers in a game development company. This theory will help creating the value proposition and mapping the customer profile for this specific segment.

To address the possible challenges in creating value proposition for the designer segment caused by the segments' non-homogeneity, theory about personas was chosen to be studied. Personas are one way of doing behavioral segmentation which helps in understanding how the users behave, think and what they are trying to achieve. As the game designer segment is fragmented, personas will help in finding behavioral patterns inside the segment. With the personas, multiple value propositions for one segment can be created to tackle the differences inside it.

As the main product that the case company is providing for its customers is a Software as a Service (SaaS) product, it plays important part in this study to understand the concept of SaaS. SaaS was studied for its benefits for the customers and how its business model works. SaaS theory that was studied supports especially the creation of value map, which is the other half of the Value Proposition Canvas that is the output of this thesis. Understanding the concept of the company's product that the value proposition is created for is crucial as the objective of value map is to describe explicitly how the product or service creates value, as it came out in the value proposition canvas theory.

Because the case company's SaaS product is targeted towards mobile game developers and it provides them with analytical tools, the industry and the role of analytics had to be studied more closely. When the smartphones, app stores and the free-to-play model came around, they revolutionized the mobile game market. New easy way to access games and also publish them gave perfect platform for the industry to grow. Competition in the market has got tougher and tougher all the time. Application markets have become oversaturated and standing out from the masses is harder than ever. To find competitive

advantage, the role of analytics has risen. During the current state analysis, it was found out that utilizing analytics is actually pretty recent phenomenon in the relatively young mobile game industry. Data-driven game development is becoming a trend and utilizing analytics have become more necessary in order to achieve success. As these trends have also been noticed in the companies and the attitudes towards game development are also changing to more data-driven, this helps the case company to sell their product.

5 Building Proposal for the Case Company

This section covers the outputs of the project, which were the results from the comparison of the current state analysis, conceptual framework, user segment interviews and the workshop.

5.1 Forming the Proposal

The proposal was formed by first creating Value Proposition Canvases with the data from the current state analysis, conceptual framework and user segment interviews. The user segment interviews were split into two parts: customer company interviews and case company's manager interviews. Below is a table illustrating how the interviews were held:

Table 3. User segment interviews

Part	Company	Interviewee	Date
1.	Customer company 1	Lead Designer 1	22.2.2017
		Game Designer 1	23.2.2017
		Analyst 1	27.2.2017
		Management 1	28.2.2017
	Customer company 2	Game Designer 2	1.3.2017
		Game Designer 3	1.3.2017
		Analyst 2	3.3.2017
		Management 2	6.3.2017
	Customer company 3	Lead Designer 2	8.3.2017
		Analyst 3	10.3.2017
2.	Case company	Case company manager 1	13.3.2017
		Case company manager 2	17.3.2017

In the part one, three different customer companies were interviewed. Inside the companies, different personnel belonging to the segments based on the segmentation were interviewed about their normal workday, their aspirations in their work and the pains and risks they encounter. Customers were also interviewed on what benefits they get from the case company’s service what kind of expectations they have for analytics services in

general. In the second part of the interviews the same question were presented to the case company's managers to get their view from the service's side, hear their experiences working with these segments and because customers do not always recognize all of their pains and needs.

After the interviews the Value Proposition Canvases were created for all the chosen segments: designer, analyst and management. Additionally, as it can be seen in the Table 3, the designer segment is split into two personas, lead designer and game designer, because differentiating patterns inside the designer segment were found when going through the gathered information. Lead designers had similar patterns in their answers, which differentiated from the answers of the game designers.

Next, the Value Proposition Canvases were validated and finalized in a workshop together with the case company's managers. The fit between customer profiles' pains and gain expectations with the case company's service's value map's pain relievers and gain creators were discussed, linked and ranked based on their relevance.

Below is a template of Value Proposition Canvas with the descriptions of what each section is supposed to contain, which was used in creating the proposal. Upper part is customer profiles containing customer jobs, pains and gains and the lower part is the value map which contains products and services, pain relievers and gain creators. Value Proposition Canvas was explained more thoroughly in chapter 4.3.3.

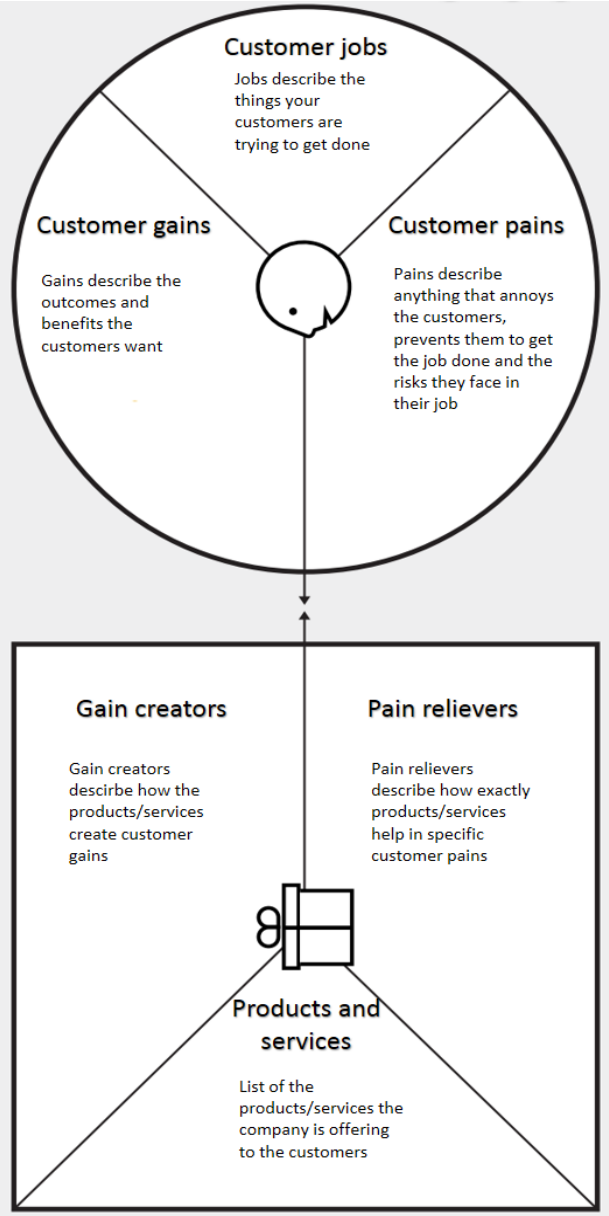

Figure 8. Value Proposition Canvas Template

Based on the results of the workshop, a proposal was formed which consists of the following parts:

- Value Proposition Canvases for two personas identified inside the designer segment (lead designer, game designer) and for the other segments (analyst and management).
- Tables illustrating specific user segment's pains and gain expectations, their relevance and the fit between pains and gain expectations and the service's value map's pain relievers and gain creators.

5.2 Proposal

This section contains the proposal of this thesis. It consists of Value Proposition Canvases and tables to support the communication of value propositions for different segments.

5.2.1 Lead Designer

Lead designers usually have a bigger picture of the game development projects than the normal game designers. They are the team leaders and do not focus on the tinier details that much. Lead designers have a lot of team/project management jobs to do as well, which differs them from normal game designers. As team leaders, lead designers also must make a lot of decisions and choices regarding the projects which gives them a great deal of responsibilities. Below is the Value Proposition Canvas for this segment, which was created based on the interview results of Lead designer 1, Lead designer 2 and Case company manager 1. Summary of these interview results can be found in Appendix 2.

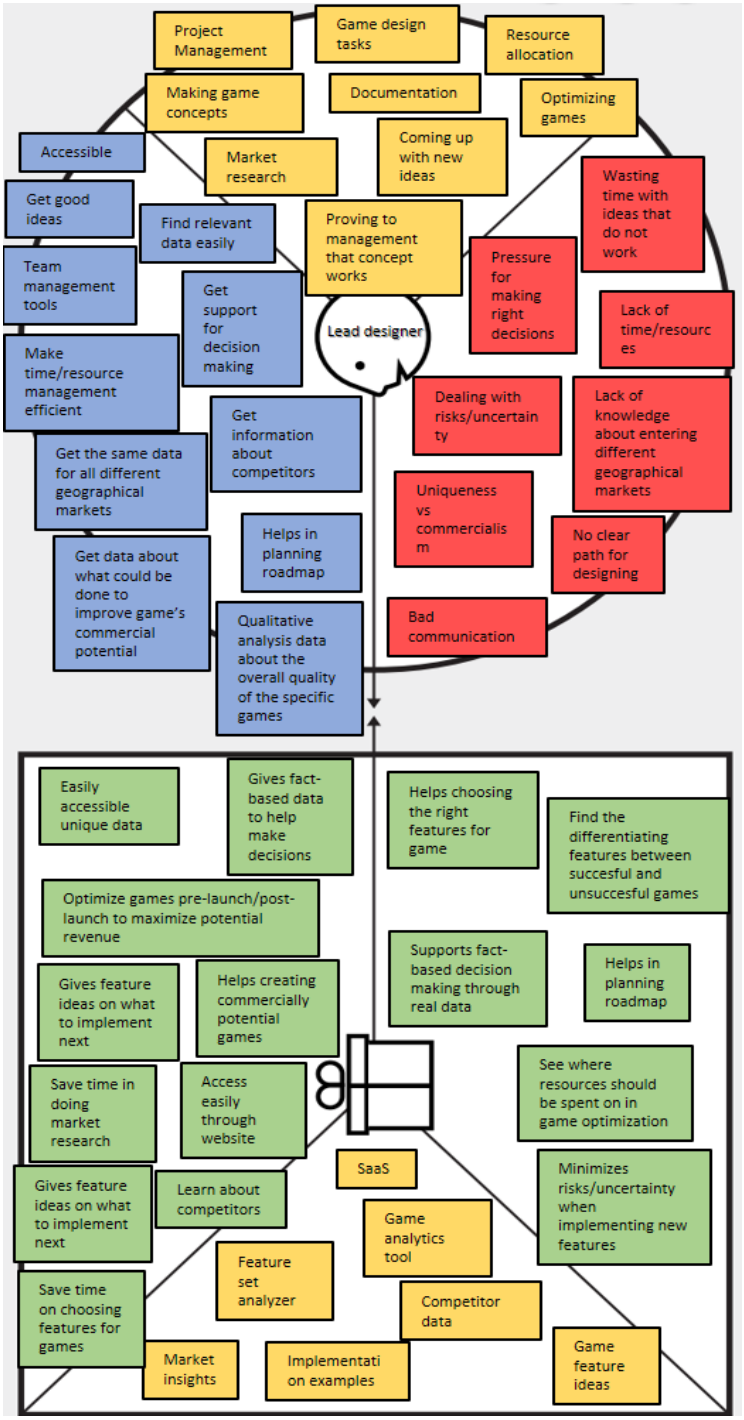

Figure 9. Value Proposition Canvas for Lead Designer Segment

Table 4 below illustrates the segment's pains and gain expectations and the case company's service's pain relievers and gain creators from the Value Proposition Canvas. Customer pains and gain expectations are ranked for their relevancies and the fit between customer profile and value map is shown. The relevance ranking and the fit were done based on interview results of Lead designer 1, Lead designer 2, Case company manager 1 and the workshop with case company managers. Summary of the interview

results can be found in Appendix 2. It is important to remember that the relevancies are generalizations of the specific segment and the actual preferences may vary between different people inside the segment.

Table 4. Fit Between Customer Profile and Value Map for Lead Designer Segment

	Customer profile	**Lead designer segment**	**Value map**
Relevance	Customer pain	Fit	Pain reliever
1.	Pressure for making right decisions	Lead designers can get information about trends and different features' effects on the commercial potential of the game and support for deciding what features should be implemented next	Supports fact based decision making through real data
2.	Wasting time with ideas that do not work	Lead designers can get valuable information about different game features and which features would be wise to implement to their own games in order to improve commercial potential	Helps choosing right features for game
3.	No clear path for designing	Different feature sets can be tested with game analyzer and useful information can be acquired for building a roadmap for the development process	Helps in planning roadmap / Find differentiating features between successful and unsuccessful games
4.	Uniqueness vs commercialism	There are no tools that directly help in balancing between uniqueness and commercialism	
5.	Lack of time/resources	Concepts can be tested to see if they have feature sets that have high potential to be commercially successful. Service also reduces time that has to be used in market research. These help in choosing where resources should be allocated	See where resources should be spent in game development
6.	Lack of knowledge about entering different geographical markets	At the moment, there is only data from one certain market available	
6.	Dealing with risks/uncertainty	Fact based data can be acquired, which reduces risks/uncertainty when implementing new features	Minimizes risks/uncertainty when implementing new features
7.	Bad communication	Service is not meant for improving communication	
Relevance	Customer gain expectation	Fit	Gain creator
1.	Get support for decision making	Lead designers can get information about trends and different features' effects on the commercial potential of the game and support for deciding what features should be implemented next	Gives fact-based data to help make decisions
2.	Helps in planning roadmap	Different concepts can be tested in game analyzer to find out most potential ones	Analyze concepts to see suggestions for development process
3.	Get data about what could be done to improve game's commercial potential	Analyze games and see what features could be implemented to them to improve commercial potential	Optimize games pre-launch / post-launch to maximize potential revenue
4..	Get the same data for	At the moment, there is only data from one certain market available	

	all different geographical markets		
5.	Team management tools	There are no team management tools in the service	
6.	Get information about competitors	Find out closest competitors in the market and see the feature sets of their games	Learn about competitors
7.	Make time/resource management efficient	Access already processed data about market trends and competitors' games. Game features that differentiate successful/unsuccessful games can be found from the service also	Save time on choosing features for games / Save time in doing market research
8.	Get good ideas	Get suggestions of what features could be added to a specific game to increase its commercial potential and ideas how those could be implemented into the game	Gives feature ideas on what to implement next
9.	Qualitative analysis data about the overall quality of the specific games	This service does not offer qualitative research or opinions about games	
10.	Find relevant data easily	Access data about game features that is not available anywhere else, which saves resources from finding the data manually	Easily accessible unique data
11.	Accessible	The service is SaaS with browser-based user interface that is accessible on any device that is connected to the Internet	Access easily through website

As can be seen from the Table 4, the service can help in most of the pains and gain expectations of lead designers. The most relevant pain that is not met is the balancing between uniqueness and commercialism. The service's core business idea is to offer tools to make games commercially potential so there are any directly alleviating factors for this pain point. Another relevant aspect that is not met with the service is the need for the data from different geographical markets as well. This information is something that is good to notice in the development of the service by the case company. The last factors that the service cannot help with are team management tools and qualitative analysis. These are not that suitable for this exact service. The output of this table shows there is value for lead designers so the major problem found out in the current state analysis is not that the service would not offer any value to this segment.

5.2.2 Game Designer

Game designer's role in the company is usually to create concepts for games. They are usually focusing on more specific things than lead designers. They usually are assigned to focus on particular areas or specific features. In the current state analysis, it was mentioned that some of the designers might be "artistic personalities" and more commonly

they are normal game designers not lead designers. Below is the Value Proposition Canvas for this segment, which was created based on the interview results of Game designer 1, Game designer 2, Game designer 3 and Case company manager 1. Summary of these interview results can be found in Appendix 2.

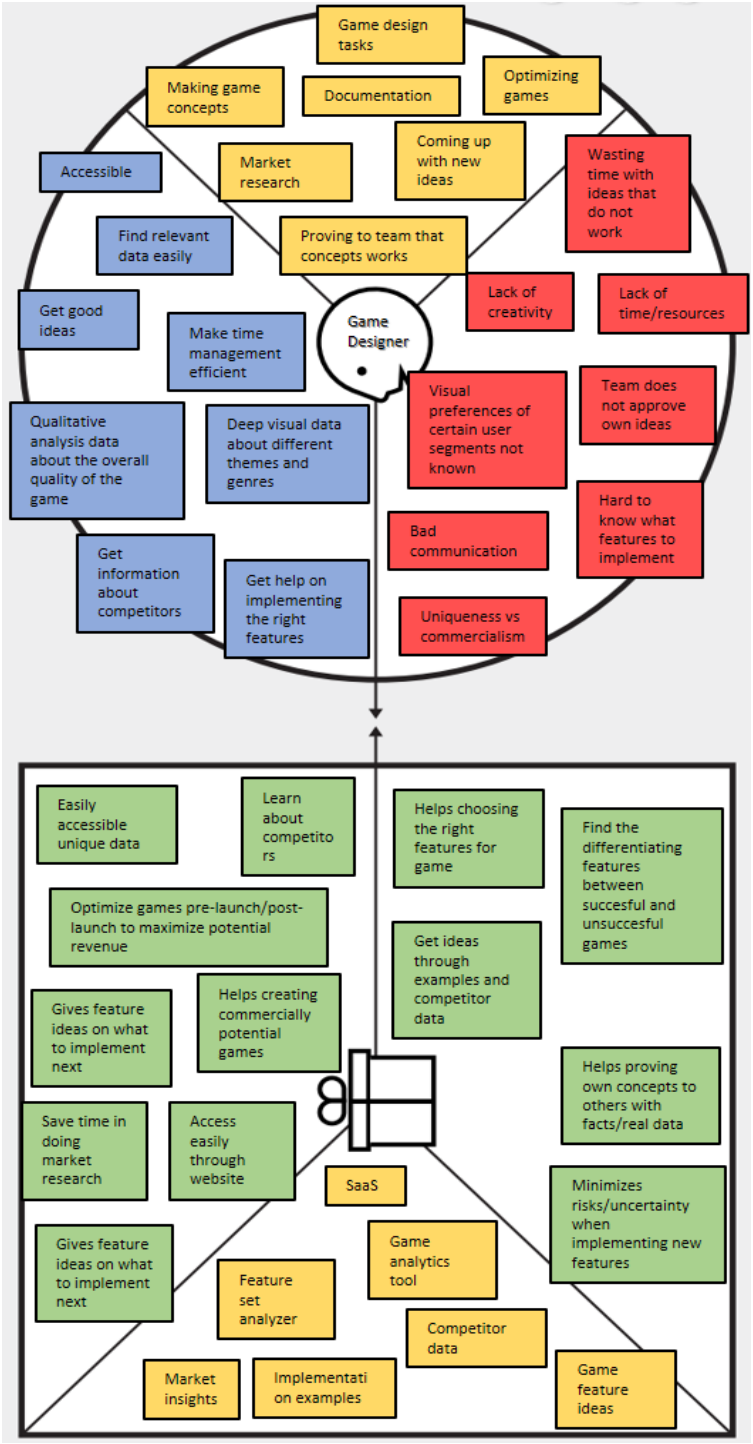

Figure 10. Value Proposition Canvas for Game Designer Segment

Table 5 below illustrates the segment's pains and gain expectations and the case company's service's pain relievers and gain creators from the Value Proposition Canvas. Customer pains and gain expectations are ranked for their relevancies and the fit between customer profile and value map is shown. The relevance ranking and the fit were done based on interview results of Game designer 1, Game designer 2, Game designer 3, Case company manager 1 and the workshop with case company managers. Summary of the interview results can be found in Appendix 2. It is important to remember that the relevancies are generalizations of the specific segment and the actual preferences may vary between different people inside the segment.

Table 5. Fit Between Customer Profile and Value Map for Game Designer Segment

	Customer profile	**Game designer segment**	**Value Map**
Relevance	Customer pain	Fit	Pain reliever
1.	Hard to know what features should be implemented	Service provides data about what features have the biggest effect on the specific games' commercial potential	Find the differentiating features between successful and unsuccessful games
2.	Team does not approve own ideas	Fact based data can be used to rationalize why certain concepts would be potential	Helps proving own concepts to others with facts/real data
3.	Uniqueness vs commercialism	There are no tools that directly help in balancing between uniqueness and commercialism	
4.	Lack of creativity	Competitor data and the implementation examples of different features can help in getting ideas and inspiration for designing games	Get ideas through examples and competitor data
5.	Wasting time with ideas that do not work	Saves time as ideas that won't work can be identified early in the development	Helps choosing right features for game
6.	Lack of time/resources	Designing process becomes more efficient as the service gives insights on what features are actually wise to implement without wasting resources	Helps choosing right features for game
7.	Visual preferences of certain user segments not known	There is some visual data available, but there is no data about different segments' preferences	
8.	Bad communication	Service is not meant for improving communication	
Relevance	Customer gain expectation	Fit	Gain creator
1.	Get help in the development process	Make sure that your games' feature sets have potential to be commercially successful using the service's statistical model	Helps creating commercially potential games
2.	Get good ideas	Get suggestions of what features could be added to a specific game to increase its commercial potential and ideas how those could be implemented into the game	Gives feature ideas on what to implement next

3.	Get data about what could be done to improve game's commercial potential	Analyze games and see what features could be implemented to them to improve commercial potential	Optimize games pre-launch / post-launch to maximize potential revenue
4.	Get information about competitors	Find out closest competitors in the market and see the feature sets of their games	Learn about competitors
5.	Find relevant data easily	Access data about game features that is not available anywhere else, which saves resources from finding the data manually	Easily accessible unique data
6.	Make time management efficient	Access already processed data about the market trends and competitors' games	Save time in doing market research
7.	Deep visual data about different themes and genres	There is some visual data available, but it is not as deep as some customers would like to have	
8.	Accessible	The service is SaaS with browser-based user interface that is accessible on any device that is connected to the Internet	Access easily through website

As can be seen from the Table 5, most of the relevant game designer segment's pains and gain expectations can be met with the service. The most relevant pain that is not met is identical to the lead designer segment: balancing between uniqueness and commercialism. The service's core business idea is to offer tools to make games commercially potential so there are any directly alleviating factors for this pain point. Other pains and gain expectations that are not met relate to the visual data. This might be useful information when concerning what to develop next in the service to meet the customer expectations even better in the future. The output of this table shows that there is clearly value in the service also for game designers, so it is not the biggest issue from the weaknesses found in the current state analysis.

5.2.3 Analyst

Analysts' job in the game development company is to provide data and conclusions to game designers so that they can make better games. The data can be, for example, user data from the game, market data or competitor data. Below is the Value Proposition Canvas for this segment, which was created based on the interview results of Analyst 1, Analyst 2, Analyst 3 and Aase company manager 2. Summary of these interview results can be found in Appendix 2.

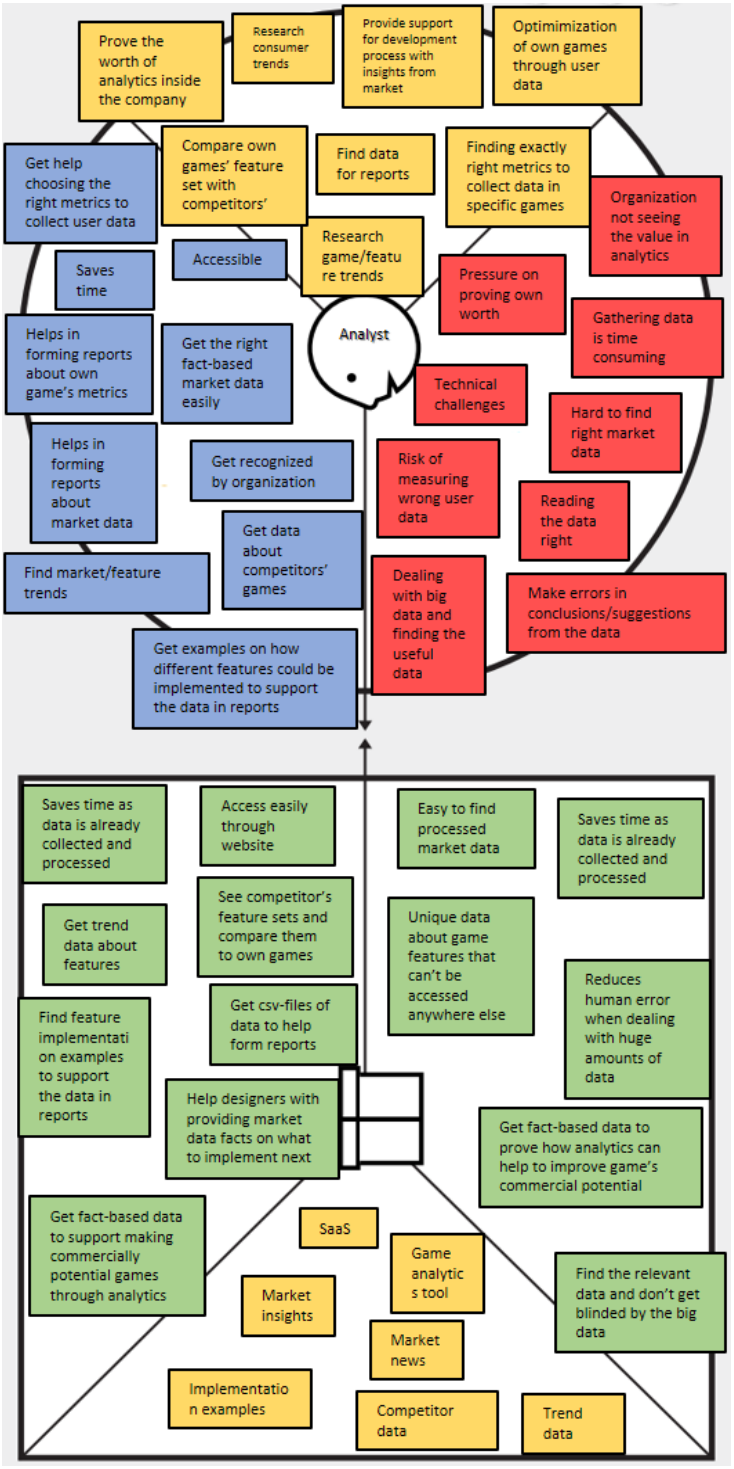

Figure 11. Value Proposition Canvas for Analyst Segment

Table 6 below illustrates the segment's pains and gain expectations and the case company's service's pain relievers and gain creators from the Value Proposition Canvas. Customer pains and gain expectations are ranked for their relevancies, and the fit between customer profile and value map is shown. The relevance ranking and the fit were

done based on interview results of Analyst 1, Analyst 2, Analyst 3, Case company manager 2 and the workshop with case company managers. Summary of the interview results can be found in Appendix 2. It is important to remember that the relevancies are generalizations of the specific segment and the actual preferences may vary between different people inside the segment.

Table 6. Fit Between Customer Profile and Value Map for Analyst Segment

	Customer profile	**Analyst segment**	**Value map**
Relevance	Customer pain	Fit	Pain reliever
1.	Dealing with big data and finding useful data	Huge data masses are processed and the relevant data is displayed in easily accessible form	Find the relevant data and do not get blinded by the big data
2.	Hard to find right market data	There is totally unique market data of the game features in the service that is not available from anywhere else and the relevant data is displayed in easily accessible form	Easy to find processed market data / Unique data about game features that cannot be accessed anywhere else
3.	Reading the data right	The data is displayed in easy-to-read form, which helps making the right conclusions and decisions for developing games	Find the relevant data and do not get blinded by the big data
4.	Organization not seeing value of analytics	The data from the service can be used to show facts about different features concerning the games' commercial potential	Get fact-based data to prove how analytics can help to improve game's commercial potential
5.	Pressure on proving own worth	Analysts can use the fact-based data from the service to prove the usefulness of analytics	Get fact-based data to prove how analytics can help to improve game's commercial potential
6.	Gathering data is time consuming	The data has been gathered and processed in the service already which saves analysts time	Saves time as data is already collected and processed
7.	Risk of measuring wrong user data	There are no tools to help tracking exact user data from specific games in the service	
8.	Make errors in conclusions/suggestions from the data	When dealing with big amounts of data it is easy to make mistakes. The processed data in the service helps avoiding human errors	Reduces human error when dealing with huge amounts of data
9.	Technical challenges	The service does not provide technical solutions	
Relevance	Customer gain expectation	Fit	Gain creator
1.	Get the right fact-based market data easily	Useful market data can be accessed from the service which can be used to provide fact-based insights what to implement next	Help designers with providing market data facts on what to implement next
2.	Find market/feature trends	The service provides trends/history data about how the usage of different features has developed	Get trend data about features
3.	Get data about competitors' games	Game comparison tool can be used to see differences between games' feature sets	See competitor's feature sets and compare them to own games

4.	Get recognized by organization	Analyst gets recognized when he/she is able to provide useful insights that lead to commercially potential games	Get fact-based data to support making commercially potential games through analytics
5.	Saves time	The data has been gathered and processed in the service already which saves analysts time	Saves time as the data is already collected and processed
6.	Helps in forming reports about market data	Data from the service can be imported to csv-files which can be used in forming own reports	Get csv-files of data to help form reports
7.	Helps in forming reports about own game's metrics	The service is not meant to measure user data	
8.	Get examples of how different features could be implemented to support the data in reports	Implementation examples from different features can be used to support the data and form even better reports	Find implementation examples to support the data in the reports
9.	Get help choosing the right metrics to collect user data	The service is not meant to measure user data	
10.	Accessible	The service is SaaS with browser-based user interface that is accessible on any device that is connected to the Internet	Access easily through website

As can be seen from the Table 6, the most relevant analyst segment's pains and gain expectations can be met with the service. The only relevant pains and gain expectations that are not met are related to measuring user data in games and technical challenges, which the service is not meant for. The output of this table confirms the strengths found in the current state analysis about meeting analyst segment's pains with the service.

5.2.4 Management

The role of management in game development companies is quite self-explanatory. They oversee the development teams and report to organization's upper management about the teams' games and their performance. Management are looking the development project mainly through financial aspects. Below is the Value Proposition Canvas for this segment, which was created based on the interview results of Management 1, Management 2 and Case company manager 1. Summary of these interview results can be found in Appendix 2.

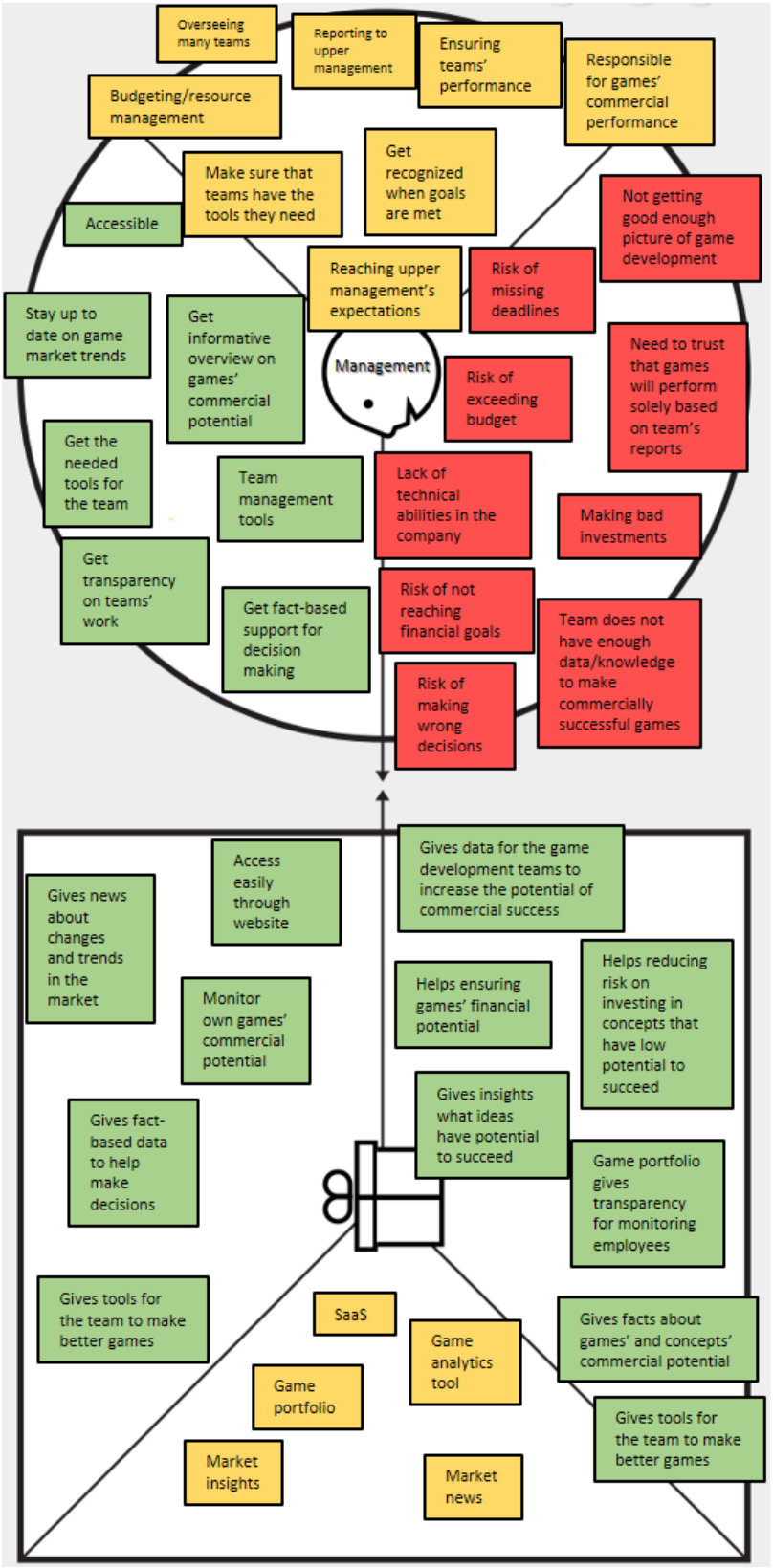

Figure 12. Value Proposition Canvas for Management Segment

Table 7 below illustrates the segment's pains and gain expectations and the case company's service's pain relievers and gain creators from the Value Proposition Canvas. Customer pains and gain expectations are ranked for their relevancies and the fit between customer profile and value map is shown. The relevance ranking and the fit were done based on interview results of Management 1, Management 2, Case company manager 1 and the workshop with case company managers. Summary of the interview results can be found in Appendix 2. It is important to remember that the relevancies are generalizations of the specific segment and that the actual preferences may vary between different people inside the segment.

Table 7. Fit Between Customer Profile and Value Map for Management Segment

	Customer profile	**Management segment**	**Value map**
Relevance	Customer pain	Fit	Pain reliever
1.	Risk of not reaching financial goals	The service can be used to optimize games' feature sets in order to be more commercially potential	Helps ensuring games' financial potential
2.	Need to trust that games will perform solely based on team's reports	By analyzing the game with the service, management can get facts about the game development process and their commercial potential	Game portfolio gives transparency for monitoring employees
3.	Not getting good enough picture of game development	With game portfolio, management gets a clear view about the development teams' work	Game portfolio gives transparency for monitoring employees
4.	Risk of making wrong decisions	Useful insights gained from the service helps management in decision making for example when choosing which game concepts to develop further	Gives insight what ideas have potential to succeed
5.	Team does not have enough data/knowledge to make commercially successful games	There are a lot of different tools and data in the service that can help the game development teams to make better and more commercial potential games	Gives data for the game development teams to increase the potential of commercial success
6.	Making bad investments	Games' feature sets' commercial potential can be seen already in the concepts phase with the service	Helps reducing risk on investing in concepts that have low potential to succeed
7.	Risk of missing deadlines	There are so many other factors that have an effect in projects' timelines what this service cannot help in	
8.	Risk of exceeding budget	The service might not explicitly reduce the game development budget because the main idea of the service is not to minimize costs, but to maximize revenues	
9.	Lack of technical abilities in company	The service does not provide support for technical and engineering issues	
Relevance	Customer gain expectation	Fit	Gain creator

1.	Get fact-based support for decision making	For example, the service provides help in showing which concepts have potential to be commercial successes. This information can be used when making decisions on what projects will be carried through	Gives fact-based data to help make decisions
2.	Get informative overview on games' commercial potential	With game portfolio view it is possible to monitor the commercial potential of company's all games from concept to post-production	Monitor own games' commercial potential
3.	Get transparency on teams' work	By using the game portfolio, management gets transparency on the game development projects and their potential in every development phase	Monitor own games' commercial potential
4.	Team management tools	There are no team management tools in the service	
5.	Get the needed tools for the team	There are a lot of different tools in the service that the game development teams can use in order to make better and more commercial potential games	Gives tools for the team to make better games
6.	Stay up to date on game market trends	News feed in service provides news about changes in different games' feature sets	Gives news about changes and trends in the market
7.	Accessible	The service is SaaS with browser-based user interface that is accessible on any device that is connected to the Internet	Access easily through website

As can be seen from the Table 7, the most relevant management segment's pains and gain expectations can be met with the service. The ones that are not met are related mostly to deadline, budget and technical risks which the service can not explicitly help in because those risks are affected by so many different factors. The output of this table matches with the strengths found in the current state analysis about meeting management segment's pains with the service.

5.3 Conclusions and Recommendations

In the current state analysis, it was found that assuring the users about the benefits of the service has been a problem. As can be seen from the tables in the previous section, the most of the different user segments' pains and gain expectations found can actually be met with the case company's service, so the biggest problems may lie in assuring the customers. Because of this, the canvases and tables are recommended to be used for supporting sales in communicating the service's value proposition to different segments. It was found out in the current state analysis that sales do not have any proper documentation for this purpose. The tables in the proposal give clearly visualized points that can be used as sales hooks to point out the value in the service for different segments. It describes what gain creators and pain relievers should be emphasized when selling the service to specific segments.

As an example, the case company could use the proposal as informational documents for sales personnel. When they know the segment they have to sell to, they can use the proposal to get an overview of what that specific segment's work consists of, their pain points and gain expectations for the service. They can see how the service they are selling can deliver value for this segment's customers and what sales hooks they can use for attracting the customer. As the relevancies are listed, they can see what are the most important pain relievers and gain creators that this service can offer to this specific segment are. The most relevant pain relievers and gain creators in the tables can be used as the most compelling sales hooks when approaching this segment.

Many of the problems found in the current state analysis concerned designer segment. To alleviate these problems, the segment was split into two different personas in order to map the needs and pains of this non-homogeneous segment in a better and wider way. Value Proposition Canvases and the tables can be utilized to identify the type of the designer faster and to see what sales hooks should be used for each type to get better sales conversion rates.

Tables can also be used to get ideas on what to possibly develop and add next to the service. For example, the unmet expectations of getting the same data from other geographical markets and about adding more visual theme data seem fitting additions to the service to meet the customer needs even better.

It is worth noting that the role of analytics is becoming more important as this relatively new industry is maturing as it came out in the current state analysis and the conceptual framework. Application market is also nowadays very oversaturated; therefore, the competition is now tougher than ever, which increases the importance of analytics for finding a competitive advantage. This trend is an opportunity for the case company's service as game developers lean on the help of analytics increasingly more.

6 Discussion and Conclusions

6.1 Summary

This thesis' objectives were divided in three parts. The first objective of the thesis was to identify the needs of the different user segments inside the game developer companies; designers, analysts and management. The second objective was to find out the compatibility between the service and the different user segments' needs. The third objective was to visualize the different user segments' needs, relevance of each need and the compatibility between the case company's service and customer needs. The purpose of this analysis and visualization was to alleviate the business challenge of the case company, which is that the needs of the user segments are not identified well enough leading to mediocre value propositions that could be improved. Further identification of the needs would help in the sales process when approaching the potential customers, improving the service's value proposition to fit the customers' needs better and to give tools to offer even better targeted services for the different user segments.

In the current state analysis, the current level of customer segmentation, the identification of the different user segments, how the value propositions are communicated to different segments and the state of the sales process were studied. The information for the analysis came from the interviews with the case company's managers and from the case company's documentation. The main insights that came out in the CSA were that the designer user segment was clearly the most problematic segment concerning the sales and that the main issue regarding value propositions may not be that the service would not provide value, but that there are issues in assuring the user segments of the existing value in the service. The strengths and weaknesses of the current state of the segmentation are summarized in the Table 2 in chapter 3.4.

For the conceptual framework, the focus was on segmentation, targeting, positioning (STP) and value proposition theories because they support the objectives of this thesis. In addition, supporting theories were researched because they are needed to understand the context of this specific case. These include personas, SaaS theory, mobile game industry and the role of analytics and the game designer segment.

After the data from the current state analysis and conceptual framework were gathered, interviews with the service's user segments and case company's managers were conducted to get the required data for forming the proposal. The goal of these interviews was to gather data for identifying different pains and gain expectations of each user segment.

Value proposition canvases were created based on comparison of data from current state analysis, conceptual framework and the interviews. Canvases were created for each user segment and additionally the designer segment was split into two personas to illustrate the differences inside that user segment.

Value proposition canvases were validated and finalized in a workshop with the case company's managers, where also the fit between the customer's pain and gain expectations with the case company's service's pain relievers and gain creators were discussed, linked and ranked based on their relevancies. Based on the results of the workshop, a proposal was formed which consists of the following:

- Value Proposition Canvases for two personas identified inside the designer segment (lead designer, game designer) and for the other segments (analyst and management).
- Tables illustrating different user segments' pains and gain expectations, their relevancies and the fit between pains and gain expectations and the service's value map's pain relievers and gain creators.

The proposal confirmed the insight that came out in the current state analysis that the main issue regarding value propositions is not that the service would not provide value, as most of the relevant pains and gain expectations were met with the service, so the issue is assuring the customers about the existing value. This proposal can be used for supporting sales and in communicating the service's value proposition, which can alleviate the weakness of assuring the customers about the existing value.

Below is a table reviewing the weaknesses of the CSA that can be alleviated with the proposal:

Table 8. Review of the Alleviated Weaknesses

Weakness	Assessment
Different segments' needs and pain points not completely defined	The proposal defines these for each segment
Lack of documentation for communicating the value propositions & sales strategy	The proposal works as a documentation for communicating the value propositions and as a support for sales strategy
Problems in communicating value propositions to designer segment	Proposal has tables for designer segments both main personas; lead designers and game designers, and these tables can be used to communicate the value propositions for both of these designer types.
Addressing designer segment's pains with the service	Designer segment's pains and gain expectations that are not met are shown in the proposal table, which can be used for developing the service
Assuring users of the benefits of the service	The tables can be used in sales for communicating the service's value proposition for each user segment, which directly helps assuring user of the benefits they can get

As can be seen from the Table 8 above, most of the weaknesses that were illustrated in the Table 2 in the current state analysis are alleviated with the proposal.

6.2 Evaluation of the Thesis

This section contains the evaluation of this thesis. It consists of how the goals were fulfilled, what value the case company can get from the thesis, the challenges we faced during the creation of this thesis and what we learned from this experience.

6.2.1 Fulfilling the Goals

The objectives set for this thesis were met:

- The needs of each of the user segments inside game developer companies were identified by conducting a customer research which revealed the pains and gain expectations of each user segment.
- The fit between different user segments' needs and the case company's service was analyzed in co-operation with the case company's managers

- Visualization covering the different user segment's needs, their relevance and how the case company's service fits to them was provided in a form of Value Proposition Canvases and tables.

Crucial factor that helped meeting these objectives was the support and co-operation with the case company, which resulted in a proposal fitting for their needs.

6.2.2 Value for the Case Company

The case company received the expected output of a Value Proposition Canvas and table for each user segment. These outputs visualize the different user segment's pains and gain expectations, how the case company's service meets them through their pain relievers and gain creators and which of them are the most important to tackle based on their relevance.

Gained value from the outputs is described below:

- Comprehensive view about the state of current value proposition
- Support for developing the service and positioning it for different segments by knowing which of the customer pains and gain expectations are met and which are not
- Support for developing sales strategies and general knowledge for sales personnel to use when communicating the value propositions to the customers
- View on what customers really want will strengthen so that the case company can focus on developing the service exactly for these needs
- The support and knowledge helps in approaching customers, which can increase the sales and lead to better conversion rate for sales meetings

6.3 Challenges

Defining the outcome of the thesis at start was quite challenging as the case company had not clearly defined it. The concrete outcome had to be figured out as the study progressed, and a decision was needed on what the best way would be to present the solution for the objectives. The outcome evolved throughout the process and in the CSA it was decided that it would be a visualization that can be used to see the user different segments and their needs.

Coming up with good questions for the customer segment interview proved to be a challenge as the goal of the interviews was to get data for possible customer pains and gain expectations. These can be hard to map since the root causes for them are not easy to find in short interviews.

The data that was gained from the customer segment interviews could have been more diverse as many of the answers gained from the interviews were quite similar to each other. Also, many of the interviewees were busy in their own work, so the number of questions and the time used for interviews had to be relatively limited. With a larger scope of interviews and more diverse answers, the identified customer pains and gain expectations could have been even wider. Due to limited resources and time, the larger scope of interviews was not possible. The conducted workshop with the case company's managers helped in this challenge to get the best possible results, since they have a lot of previous experience and information from working with these user segments.

6.4 Learnings

Working in game analytics environment was a great experience since we are interested in game industry and the analytics revolving around optimizing and developing games is a fascinating subject. This gave us a possibility to see how the game development processes actually go and how the analytics can be utilized in that in a real business context.

The context of the thesis being about customer segmentation and sales was also a great opportunity to get practical experience about segmentation and value propositions, which we had studied in school but had no real experience about. These learnings will be beneficial for us in the future.

All in all, this was a positive experience for us as the value was delivered to the case company, which is the most key factor in customer projects.

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Appendix 1: CSA Interview Questions and Answers

This data has been removed for confidentiality reasons.

Appendix 2: Summary of Customer Company and Case Company Manager Interviews

This data has been removed for confidentiality reasons.