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Financial plan for a start-up

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ABSTRACT

A business plan is the foundation of every business. The subject of this study is a start-up's financial part of the business plan which includes investment calculation, profitability calculations, and sales calculation. The objective of the study was to determine the sales targets and the growth for the first year so that the company will start a profitable business. The study also sought to find out how the different variables affect the profitability of the business.

The method of study was a practice-based thesis. One of the sources was the cost estimates given by the founders of the start-up. The theoretical section discusses calculations of a business plan and financing options for a start-up company. Then the product launch plan of the company is introduced and the calculations of the financial plan. After the calculations of the financial plan financing options for the case company are reviewed Finally, a summary and conclusions are presented.

In the conclusion, the profitability calculations show how many paying customers are required to meet the sales targets. These calculations help to estimate how much funding is needed and what kind of increase in the revenue the company could expect in the first 12 months if the business is growing as planned.

Keywords: investment calculation, financing, profitability, start-up

Lahden ammattikorkeakoulu

Liiketalous

LÅNG EEMELI:

Start-up yrityksen liiketoimintasuunnitelman laskelmat

Opinnäytetyö: 38 sivua, 5 liitesivua

Kevät 2018

Tiivistelmä

Liiketoimintasuunnitelma toimii perustana jokaiselle aloittavalle yritykselle. Tämän opinnäytetyön aiheena on start-up yrityksen liiketoimintasuunnitelman laskelmat, joihin sisältyy rahoituslaskelma, kannattavuuslaskelmat sekä myyntilaskelma. Työn tarkoituksena oli saada selville minkälaisia myyntimääriä yritys tarvitsisi, jotta yrityksen liiketoiminta olisi kannattavaa. Työssä myös tutkittiin, mitkä ja miten eri muuttujat vaikuttavat yrityksen kannattavuuteen.

Opinnäytyö työ suoritettiin toiminnallisena opinnäytetyönä. Laskelmien lähtökohtana oli tapausyrityksen perustajien antamat kustannuslaskelmat. Opinnäytetyön teoreettinen osuus koostuu liiketoimintasuunnitelman laskelmista sekä yrityksen rahoitusvaihtoehdoista. Tiedon hankinnassa käytettiin alan verkkosivuja sekä kirjallisuutta, jonka perusteella teoreettinen osuus kirjoitettiin. Empiirisessä osuudessa esitellään tapausyrityksen tuotteen lanseeraus suunnitelma sekä liiketoimintasuunnitelman laskelmat. Laskelmien jälkeen vertaillaan mahdollisia rahoitusvaihtoehtoja tapausyrityksen näkökulmasta. Viimeisenä esitetään johtopäätökset ja yhteenveto.

Tutkimuksen tulokseksi saatiin arvio siitä, kuinka paljon maksavia asiakkaita yritys tarvitsee päästäkseen myyntitavotteisiin. Nämä laskelmat helpottavat arvioimaan rahoituksen tarpeen sekä kuinka suurta myyntiä yritys voi odottaa ensimmäisen vuoden aikana, jos yritys kasvaa suunnitelmien mukaisesti.

avainsanat: rahoituslaskelma, rahoitus, kannattavuus, start-up

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1 INTRODUCTION

1.1 Background

This thesis was commissioned by a start-up company, whose objective is to find investors with the help of profitability calculations and to make a proper financial plan. The company has created a betting application which is ready to be launched on the market and they are now seeking investors and partners to fund the business operations.

I worked with two of the founders of the company to create a financial plan based on the cost estimates. The commissioner of this thesis has provided the cost estimates and these estimates are used as a basis for calculating the profitability calculations of the thesis. With these profitability calculations, the company has an indicator how much funding the company needs to keep the business operating.

1.2 Objectives

The objective of the thesis is to create a financial plan for the case company. The financial plan shows the company's sales target of the first year, in order to cover the expenses and also to find out if the estimated funding is adequate to keep the company operating. These calculations estimate the number of customers as well as the individual customer's consumption, which enables to estimate the cash flow statement and sales calculation. Another objective is to find out what differend financing options the case company has, and which ones are the most suitable for the company.

Profitability calculations have an important role in estimating the sales targets and these calculations help to evaluate the efficiency and effectiveness of the business. The purpose of the profitability calculations is to find out how much sales the company must do to cover the costs. As the result, the calculation shows how much you must gain in sales at a certain price and over a certain period of time. Profitable business covers

expenses and yields profits to its owners. (Yrityssuomi 2017.)

Profitability calculations and financial statements are the fundamental part of the company's business plan. These calculations and business plan are often a prerequisite for applying funding and other supports for the company. Careful planning is a way to ensure that a company that is founded is operating on a realistic basis. (Yrityssuomi 2017.)

1.3 Methodology

This thesis was completed as a practice-based thesis. The practice-based thesis is a twofold entity: it contains a functional part of the product and the thesis report, in example the documentation and evaluation of the results of the thesis process. The output of the functional thesis should always be based on professional theory and knowledge hence a functional thesis report must always include a theoretical framework part. (Virtuaali Ammattikorkeakoulu 2017.)

As a practice-based thesis, the aim is to instruct and guide practical activities (Vilkka & Airaksinen 2003, 9). One of the goals of the practice-based thesis is to demonstrate the student's ability to combine theory and practical skills and to think these matters critically. It helps students to develop their professional skills and to develop the professional culture of their own field. (Vilkka & Airaksinen 2003, 41-42.)

1.4 Theoretical framework and thesis structure

The theoretical framework of the research is the perspective from which the subject of the study is examined. It involves studying the research literature on the previous subject, defining key concepts and selecting and opening the approach to the research to the reader. The theoretical reference framework is therefore like a red thread that guides the research and, on the other hand, relates it to other research and literature in its own field of study. The theoretical framework of the thesis is based on literature on business plan calculations and financing a start-up. (KvaliMOTV 2018.)

Calculations of a business plan

- Investment calculation
- Profitability calculations
- Sales calculations

Financing a start up

- Financing options for a start-up

Case study

- Backround of the Case company
- Case company's financial plan
- Conclusion

FIGURE 1. Thesis structure

The figure above (figure 1) shows how the thesis is divided into three sections. The theoretical part of the thesis includes financial calculations and financing options for a start-up. The last section examines the results of the case study, suggestions and conclusions of the study.

2 BUSINESS PLAN FINANCIALS

Every starting company should have a proper business plan before the company starts operating. A business plan is a written description or a roadmap of the company's future. The business plan tells what the company's plan and goals are and how is it going to achieve those targets. A business plan is a strategic tool which shows where the business is today with certain resources and abilities and where is it going to be in the future. The business plan describes the company's success factors, sources of revenue, strategy, and actions. (Entrepreneur 2018.)

The business plan is the company's most important and versatile tool. It describes business' own core competencies, strengths, and weaknesses. The company must also think the relationship with other similar companies in the same industry, their position in their market area as well as potential needs for personnel, production, marketing, and financial resources. The carefully crafted business plan creates the basis for the company to build its business and to succeed. (Forbes 2018.)

When the plan is drawn up, the founder is obliged to think about all of the aspects of the company. A good plan serves as a basis for all the activities of the company: investments, training, human resources, finance, production organization, marketing, advertising, subcontracting, and other business development related issues. (Forbes 2018.)

The business plan is created around the business idea which expresses the purpose of the company. It tells you why the company is in the market. The business idea tells us what the company's main products and services are, who the company serves and what needs to be satisfied. (Osaava yrittäjä 2018.)

The business idea is a description of how the company intends to make money and it answers three questions: what, to whom and how? The business idea is not permanent but needs to be renewed and adapted to the environment. (Osaava yrittäjä 2018.)

After the business plan is ready the company can start to create its financial plan. The purpose of the financial plan is to determine if the business idea is profitable. The financial plan should cover following areas:

1. Investments and funding: It shows how much funding is needed and where the company is going to acquire it.
2. Profitability: It shows the businesess’ profitability on a monthly and annual basis.
3. Sales: It shows sales revenue and helps to evaluate businesess’ budgeting.

(OpetusTV 2018.)

2.1 Investment calculation and cost calculations

Investment and cost calculations show the sources of funding and the expenditure requirements for the company in its initial stages. The company needs funding for the investments that must be made to launch the business operations. Expenditure requirements include for example initial stock purchases, machinery for production, registration fees and licenses, security deposits and working capital for three to six-month period. In the initial stage the company does not usually generate sufficient sales to cover costs, so the company must estimate fixed costs in the working capital. The working capital is added to investment requirements. The sources of funding must cover the expenditure requirements, or the business will run out of capital before the company is generating enough sales to cover the costs. The sources of funding may comprise shareholders' equity and property is given as a capital contribution, loans, business subsidies and external equity investments. (Uusyrityskeskus 2017.)

Cost calculations and estimates are required to determine how much funding the company needs. Therefore, the founders must know the costs of running the business. The company needs to maintain a variety of

production factors, such as premises, personnel, machinery and equipment, materials and goods. These factors generate costs to the company. (Niskavaara 2012.)

The term cost refers to the measured value of the factor of production. It is formed by the sacrifice made to create the product when production factors are used and consumed (Alhola, Lauslahti, 2000, 54). The table below (table 1) describes basic concepts of cost calculations.

TABLE 1: Concepts of cost calculations

Concept	Definition	Example
Cost object	Anything which costs are wanted to be determined	Product, customer, task project
Direct costs	A part of the costs that is possible and reasonable to target directly to a specific cost object	Salaries of employees, supplies, materials. subcontractors
Indirect costs	A part of the costs that is not possible or reasonable to target directly to a specific cost object	Information systems, administration, part of marketin
Cost unit	remit, unit or other entity which costs are monitored	company, department, process, function

The cost object is defined in the cost calculation when needed. It can be for example a task, process, product or customer. This cost object can be anything in the production process which costs, and profitability is wanted to be determined. (Tyni, Myllyntaus &Suorto 2009.)

The cost unit is the smallest department of the company or the area of responsibility which costs are separately recorded or monitored. One of the tasks of the cost unit calculation is to be a part of a specific product's cost calculations. (Tenhunen 2013.)

The total costs can be separated according to the calculation situation in several different ways. Most commonly the costs are divided into variable and fixed costs. An important task of cost accounting is to determine cost-per-product for profitability analyzes and pricing. Another option is to divide the costs into direct and indirect costs. Direct costs are often variable (for example, materials, and supplies or subcontracting) and can be allocated easily to products or product groups in cost accounting using product or work numbers. (Niskavaara 2012.)

Indirect costs can not be calculated directly on individual products as they are part of the whole production process for a variety of products. Indirect costs are also often called overheads. Indirect costs are variables, such as energy in the mill (an example of overhead in the production process) and fixed costs such as management, marketing, and administration costs. (Niskavaara 2012.)

2.2 Profitability calculations

Profitability simply means that money entering the company, the turnover, is higher in relation to outgoing money or expenses (Vilkkumaa 2010, 44). Absolute profitability is the company's expenses subtracted from the company's income. Relative profitability means the ratio of the profit to the equity invested in the company. (Yritystutkimus Ry 2011, 60.) Statistics of the financial statement analysis illustrate short-term profitability. Company's long-term profitability can be found out by comparing the financial statements with each other for several years. (Niskanen & Niskanen 2004, 112.)

The profitability calculation is a tool for an entrepreneur to plan and monitor the profitability of the company. With the calculation, the company can figure where the break-even point is and find out how many products are needed to sell at given price level, profit margin, and sales volume. Break-even point gives a sales target for the company. The sales target can be divided into monthly, weekly or daily sales targets. Profitability calculations help the entrepreneur analyze if the price level, profit margin,

and sales volume are realistic. Changing the price of the product a simple sensitivity analysis can be created to show how the change in price affects the profit forecast. (Uusyrityskeskus 2017.)

The most used profitability indicators are the following: operating profit margin, return on investment, return on equity and return on assets. Only profitability indicators that were used in this thesis are being reviewed in more detail.

The operating profit, also known as EBIT (earnings before interest and taxes), shows how much the actual operating income is left before financial expenses and taxes. The operating profit margin is calculated by dividing the operating profit (EBIT) by company's revenues. The company's revenues include net sales and other operating incomes. (Kallunki 2014, 94.) The formula for operating profit percentage is:

$$Operating\ profit\ margin = \frac{operating\ profit\ (EBIT)}{net\ sales + other\ operating\ incomes} \quad (1)$$

Based on this indicator, it is possible to estimate how much is the company's margin, how well it has been able to price the products and services and how cost-effectively it has acquired the net sales. (Ikäheimo & Walden 2012, 107.)

Return on Investment (ROI) is one of the key profitability indicators. It shows in which ratio the net income and interest yield of the period under review are related to the invested capital. The capital invested is the sum of equity and interest-bearing liabilities. The return on investment percent is calculated using the following formula. (Ikäheimo & Walden 2012, 106.)

$$Return\ on\ investment\ \% = \frac{net\ income + interest\ yields}{invested\ capital} x100 \quad (2)$$

The return on investment percent reflects how well the capital invested in the company has been generating profit to the investors. This number can be compared with the company's previous years and on the other hand with other companies. Based on these findings, it is possible to evaluate

whether the company's financial position has developed positively and whether it is competitive with other companies in the industry. (Ikäheimo & Walden 2012, 106.)

Return on Equity (ROE) is similar to the ROI, but it is solely in the perspective of the equity investors. It shows in which ratio the net income of the period under review is related to the equity. The return on equity percent is calculated using the following formula. (Ikäheimo & Walden 2012, 106.)

$$Return\ on\ equity\ \% = \frac{net\ income}{equity} x100 \qquad (3)$$

This indicator gives the owner a good idea of how the equity in that year has made a profit. The greater the risk for the investor the higher the return on equity should be, as investors demand compensation for investing in the uncertain investment instead of a safe investment. Often, the industry has similar yield requirements and therefore a sector-based comparison illustrates the company's financial success to the investor. (Ikäheimo & Walde, 2012, 106.)

2.3 Sales calculations

Sales calculations include estimates of monthly sales and expenditures. Sales, also known as revenue, is the amount of money that is brought into a company by its business activities, usually from the sale of goods and services to customers. (Investopedia 2018a.) Sales calculations are broken down by product or customer group and it shows the minimum billing target for each section. Sales calculations show how the business is creating revenue and it helps to predict cash flow. In sales calculations, prices are calculated without VAT and every product's sales margin is calculated. It estimates how much each product or service is making revenue and how much revenue the company will be creating in total. Sales calculations show how much revenue needs to be created to break even and which products or services are most profitable. (Liiketoimintasuunnitelman laskelmat 2018.)

Estimating sales before starting a business can be hard because there is no previous data to base the calculations on. Market analysis is a way to help estimate sales possibilities of a new company. A market analysis is a quantitative and qualitative assessment of a market. The goal of a market analysis is a description of the market, which explains the customer needs and trends of the market, analyzes the competitive situation and assesses the market potential for the business under review. (Digitalmedia 2018.)

With the help of the market analysis, the business can do an estimation for monthly sales. The sales estimation should include few different projections. The best-case scenario would be the most optimistic estimate for the first year.

The worst-case scenario is the least optimistic scenario where there are very little sales during the first six months to a year. Likely scenario is something between the worst scenario and to most optimistic one. These different projections help the owner to evaluate the risks if the company does not succeed as planned and make sure there are some preparations for the worst-case projection. (The Balances Md 2018.)

With sales calculations, the company can predict its cash flow. Cash flow statement includes revenue, expenses, funding income and funding expenses. The cash flow statement shows monthly revenue and expenses in example sales, wage costs, premiums, business expenses and other running expenses. In addition, they estimate the cost of financing and, on the other hand, the funding received, whether it is equity financing or loan money. These sums give rise to a monthly breakdown of available liquid money. The cash flow statement predicts the development of the cash flow and ensures the future adequacy of assets. The development of cash flow forecasting is one of the most common budgeting and reporting tool in companies. (Investopedia 2018b.)

Cash flow statement also gives a prediction of a break-even point. Break-even point is the point when the company's expenses are equal to the generated revenue and after that, the company should start yielding a

profit. The process of calculating the breakeven point of a startup is simple in theory. The problem is that it is hard to predict for most businesses because the process requires you to make a number of assumptions. If these assumptions are wrong, your breakeven point could change drastically. This can cause a series of problems like a cash shortage, which will then cause you to either invest more of your personal money, find new investors, or secure a loan. Break-even analysis is essential when the business needs to acquire funding. Potential investors want to know when their investment is going to produce profits before they are going to trust a company with their money. (Investopedia 2018b.)

3 FINANCING

As the founder of a business, you must ensure that you have sufficient funding for the establishment and start-up phases. You can either use your own capital or debt. (Yrityssuomi 2017.) The figure (figure 2.) below shows company's capital structure.

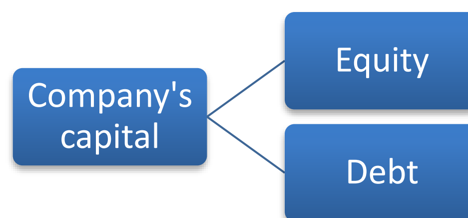

FIGURE 2. Company's capital structure

The need for financing should be thoroughly investigated. Key financial planning is to find out:

- How much money is needed
- From what sources it is available and at what price
- What kind of financial structure does the company want: the relationship between equity and liabilities?

(Yrittäjät 2017.)

A start-up company can obtain funding from various sources. When considering the funding options, it is important to understand the motivation of the financiers and how they expect to profit from the investment. Private funding is looking for an interest yield to the invested capital or a rise in the value of the company, whereas public funding is

usually benefitting indirectly through tax revenue and growth in exports. (Spinno 2017.)

Equity is the part of the company's capital that has no repayment obligation, as opposed to debt. Generally, a company has two types of equity: the investor's or owner's investments in the company and the company's retained earnings. (Yrittäjät 2017.) The figure (figure 3) below shows a company’s capital structure.

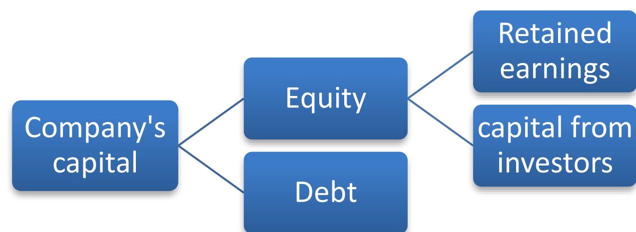

FIGURE 3. Company’s equity structure

Investors’ capital is gained through a share issue. When company arranges a share issue, investors invest capital in the company in exchange for company's shares. For a small, closely held corporation, the original owners may have all issued shares. (Investopedia 2018c.)

Retained earnings refer to the company’s net earnings which are not paid out to the investors as dividends. Usually, these earnings are reinvestments to the company, such as buying new machinery or spending the money on research and development, to create growth. (Investopedia 2018c.)

3.1 Financing for Start-Ups

Both the internal financing of the founders and the external risk investors are part of the start-ups financing life cycle. In most cases, this financing lifecycle can be divided into five different financing rounds to raise funds for the company's operations. (Adioma 2018.) The figure below shows the financial cycle of a start-up.

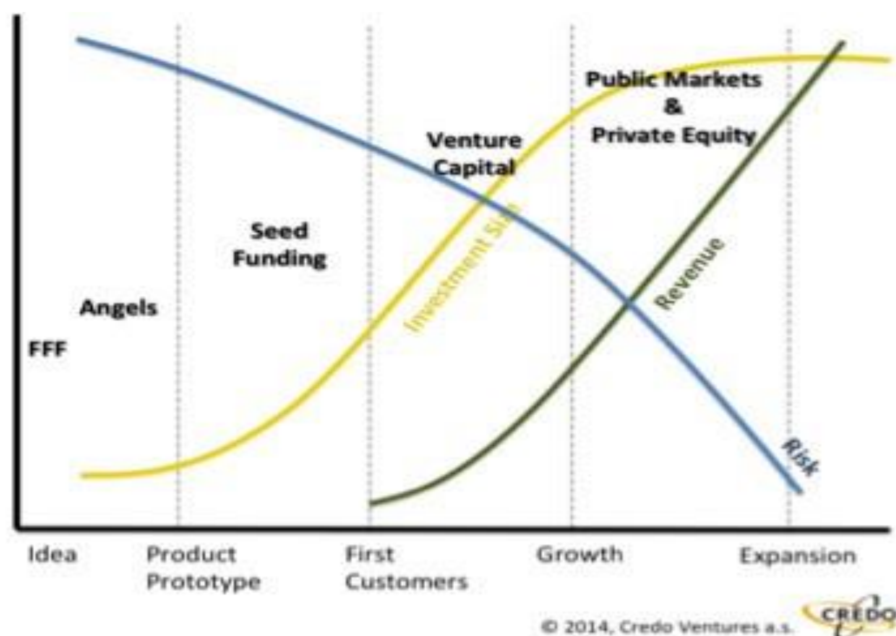

FIGURE 4: Startup's financial cycle (Credo ventures 2014)

The idea Stage, whereby the business idea and model of the startup company are only being developed at the idea level. In this case, the actual company has not yet been set up and the only personnel involved is the founder alone. Financing of the idea phase naturally comes from the founder itself, which means that the founder finances to the necessary extent. (Adioma 2018.)

In the co-founder stage, the founder finds a business partner. In most cases, the new partner also brings a varying amount of funding with them. Often, the future associate will receive a corresponding share of the company. At this stage, the company's idea has often shifted from the concept level to a concrete product or service, so-called prototype. (Adioma 2018.)

Family and Friends Round is the third stage where the founders of the company are trying to raise additional funds from their own families and acquaintances, which in turn receive smaller shares of the future company. When it comes to family and acquaintances, it is presumptuous that they do not demand as great yield or interest to their money as fully external risk investors. In this stage, the startup company has an existing prototype of the product or service developed but its further development requires additional funding. (Adioma 2018.)

The fourth round is the angel round. In this stage, the company has a working product or a service but needs funding to start large-scale producing or marketing to get a market share and a customer base. Angel investors get a share of the company in return for their investment. (Angelblog 2017.)

Last round is usually the venture capital round where the company has a working product and customers but needs further funding to really expand the market. Venture capital firms or funds invest in the company in exchange for equity or an ownership stake. (Investopedia 2018d.)

3.2 Business angels and venture capitalists

A business angel is an investor who seeks out promising start-ups to support financially. Angels are typically entrepreneurs, retired corporate executives or professionals who have already have made money or have high net income. (Howard & Terjesen 2006, 30.) The figure below (figure 5.) shows different options to raise capital from investors.

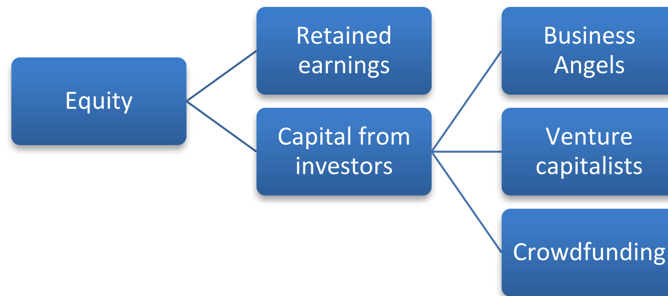

FIGURE 5. Capital investor options

Business angels and venture capitalists both have an objective approach to determining whether or not to invest because they usually do not have any previous relationship with the entrepreneur (Howard & Terjesen 2006, 31). The figure below (figure 6) shows at what stage the business angels invest in a company.

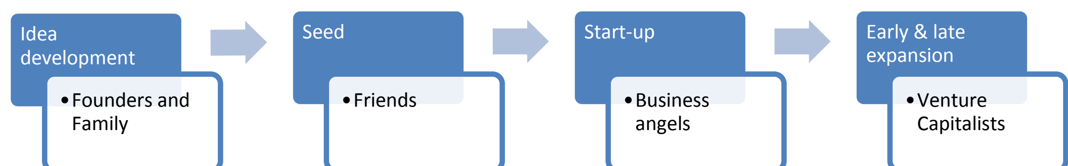

FIGURE 6. Where business angles fit in the mix

Business angels prefer funding high-risk companies in their earliest stages. Those are often firms in which institutional venture capital providers are unenthusiastic to invest. (Howard & Terjesen 2006, 33.)

Financial decisions are more flexible with business angels compared to venture capitalists. Venture capitalist tends to have higher targeted rates of return and shorter investment horizons whereas business angels are more patient with their investment. Raising funds from financial institutions usually, have higher fees compared to business angels. (Howard &Terjesen 2006, 33.)

In addition to the raised capital, business angels bring their personal business skills with them. Assistance and advice, from an investor who already has experience in the business world, can be very valuable to young entrepreneur firm. (Howard & Terjesen 2006, 33.)

A disadvantage with business angels is that they are less likely to make follow-on investment to the same firm. On the other hand, venture capitalists also do expansion funding for their existing portfolio companies. (Howard & Terjesen 2006, 34.)

The entrepreneur may be forced to give up some degree of the control because business angels prefer to have to say in the running of the company. A minority of angels have a reputation to be "devils" that have more self-serving motivates for the investment, rather than promoting the good of the firm. (Howard & Terjesen, 2006, 34.)

3.3 Crowdfunding

Crowdfunding refers to the collection of funding from a large group of people. There are several forms of crowdfunding. Crowdfunding is usually divided into three main categories: equity-based, reward-based and donation-based. (Honkinen ym 2016, 4.7.) The figure below (figure 7) shows how crowdfunding campaign works.

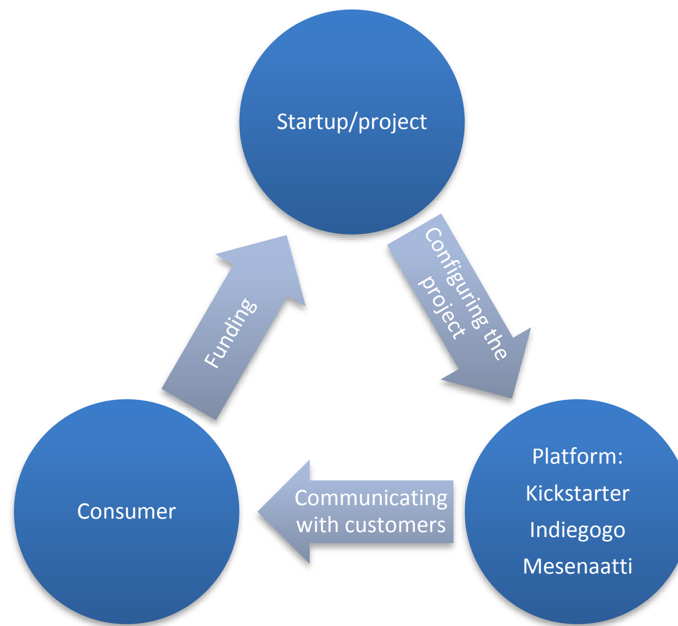

FIGURE 7. How crowdfunding works

In equity-based crowdfunding, investors are offered a share of the company's profits. The financed company agrees to pay investors part of the profits of the company or to issue shares or other securities to its financiers. Typically, crowdfunding is collected through crowdfunding platform via the internet. Crowdfunding platforms are services where funders can advertise the funded company or product and raise funds from investors. (Honkinen ym 2016, 4.7.)

In reward-based crowdfunding, a company raises funds from individual investors also called backers. In return for donations, backers receive rewards that could be for example the product that the company is going to produce, a thank-you-note or the backer's name on a website. The received reward usually increases according to the amount donated by the backer. Reward-based crowdfunding is fitting for companies or start-ups that don't qualify for traditional small-business loans but have creative product. This type of crowdfunding is also a good way to test a market (Nerdwallet, 2017.)

Donation-based crowdfunding is usually non-profit funding for the funders. Typically, funders do not obtain any ownership or rights to the company or the product. This type of crowdfunding needs a large number of contributors because donated amounts are usually small. Charities are types of donation-based crowdfunding projects where the organization seek funds to aid people in need for example in natural disasters. (Investopedia 2018e.)

Crowdfunding has been gaining popularity in the last decade for several reasons. An uncertain economic situation has continued since the financial crisis and financial regulation has tightened. Because of an uncertain economic situation, there has been a need for alternative financing method for high-risk projects and companies. Also, Number of the internet and social media users have grown drastically which makes it easier to market and find the target audience for a product. (Pitkänen 2014.)

3.4 Revenue-based financing

Revenue-based financing is a type of loan which monthly repayments vary depending on the company's revenue. Monthly payment is a percentage of the company's revenue. Investors charge a fixed amount for the capital which usually varies between one to three times the amount borrowed. Because the repayment of the loan is based on the company's revenue the repay time will fluctuate. Basically, the faster the company's revenues grow the quicker the company can repay the loan and vice versa. (FittSmallBusiness 2018.)

Amount of loan given to a company ranges typically from 50 000 dollars to one million dollars. Repayment percentage of the revenue can be as high as 8% and the duration of the loan depends on the success of the company. The table below displays the general terms and requirements for a revenue-based financing. (FitSmallBusiness 2018.)

TABLE 2. Revenue based financing overview (Fitsmallbusiness 2018)

Minimum Monthly Revenue Requirements	$15,000 - $100,000
Loan Amounts	$50,000 - $1,000,000
Gross Margin Required	50%+
Payment Terms	A percentage of gross monthly revenue (usually 3-8%) paid monthly
Total Cost of Capital	1x - 3x borrowed amount
Interest Rate	18% - 30%
Funding Speed	3 - 4 Weeks

The table above (table 2) shows overview of a revenue-based financing loan. Revenue-based financing is typically for companies that already have a steady stream of monthly revenue but are too small for venture capitalists to invest in. Revenue-based funds are used to expand the already existing company and not so much as a seed money. Investors are expecting the company has a plan how they are going to use the funds to grow the business and its revenue. These funds can be used for example marketing initiatives, product development or new hiring. (FitSmallBusiness 2018.)

4 BACKGROUND OF THE COMPANY X

Company X's business idea is to create a betting application and mobile application that is mainly focused on esports (electronic sports). Company X's business idea is unique compared to the regular betting applications because it combines betting with social media experience. Company's gaming application provides a tool for players to bet against each other and share their sports thoughts with their friends. Players can also create their own bets and tournaments.

Even though Company X is a betting company its strategy is not to compete with the regular betting companies. Company X is trying to create a new social aspect to betting which is something that other companies on the market are not providing.

The company's biggest challenge with the competitors is lack of resources compared to the big betting companies. A small startup like Company X can't afford to apply same marketing strategy as other companies which are focused on sports like soccer, ice hockey, American football, tennis, and basketball etc. That is why Company X is focused on esports which is still small-scale sport compared to the traditional sports but it is growing very fast.

Because Company X is introducing a new way of betting it has its own risks. It is hard to estimate if there is demand for this kind of betting because there are no similar products on the market yet. It is not known if customers prefer this new betting style of betting against other players over to the betting against the company.

The company's opportunity to succeed in betting market is marketing in esports. Esports has a lot of followers but there is not yet an exclusive betting tool to these customers. Company X is trying to create a betting tool that is part of the whole esport experience and that is why the main marketing and advertising would happen through esport organizations and teams.

Company X has set three phases on their product launch plan. The first target is to launch and market the betting application as a white-label product in esports. White label product is a product that is built by one company and other company's use it and markets it as their own. They can modify the product to match the company's brand, image and marketing and the customer may not know that the actual product is created and/or produced by other company. The second target is to expand the white label product to other sports as well. Third and final target is to launch the application and market it under the company's name.

When company X has completed funding the first target is to launch the mobile application as a white label product under esport teams and organizations. At this point, founders have set up the trading company on Malta and beta-testing has been completed. Beta-testing is a phase where the product is being tested by partners but is not yet available for customers. The mobile application will be ready-to-use and available to download for mobile devices. This phase is estimated to last for three months.

The idea of white label phase is to market the product in a cost-effective way to the target audience and customers. The other objective is to test the product in the market. Market testing involves taking a small-scale version of the business idea and getting customer feedback. The white-label application's idea is to achieve a win-win situation for the company X and for the esports teams. The esports teams and organizations would yield affiliation revenue via new paying customers. In white-label product, the application has a theme (colors, teams schedule, live-tracking, notifications) by each team, even though the actual application is the same for every team. The application would be available for download at the teams and organizations websites.

In the second phase, the company plans to expand the white label product to the other sports. Basically, the white label application could be customized to any sports or theme and the marketer would be able to create own style and design. The white-label product for other sports would work the same way as the white-label product for eports. Teams and organizations would earn profits via affiliate marketing and the Company x would get new paying customers because of the expanded marketing.

In the third phase, the company is going to release two betting applications under the company's name one for Android and another for iOS platform. The Play-Store and the Appstore applications do not allow the users to play with real money but with coins and tokens which do not have monetary value. The idea of these versions is to get the application to the mobile stores like Play-store and app store. The real money betting application would be available to download at the company's own website. The third phase would go live when there is constantly enough paying customers to cover the expenses and the company is generating profit. The third phase is estimated to start after six months.

5 COMPANY X'S FINANCIAL PLAN

Company X's financial plan includes investment calculation, profitability calculations and sales calculations. The investment calculation was done based on the expenditure estimations that were provided by the company. The investment calculation shows how much are the company's estimated expenses on monthly basis. The objective of the profitability calculations was to find out how many customers with a certain consumption company needs to cover the expenses and what kind of profit can be expected if the customer base keeps growing as planned.

Another task was to estimate the sales amount for the first year this gives an estimate how much funding is adequate to keep the company operating during the first year. Cash flow estimate was created by using the monthly expenditures and sales. The cash inflows and outflows caused by core business operations shows how much capital the company needs to raise so that the company can start operating.

5.1 Investment calculation

Investment calculation shows the sources of funding and the expenditure requirements for the company in its initial stages. Expenditures can be divided either according to the phases or to direct and indirect costs. The company has provided me cost estimates according to the phases on monthly basis. The first phase will require most of the resources because it includes almost all the mobile application development and required licenses to operate the trading company in Malta. The table below shows how the expenditures are divided by each phase and months.

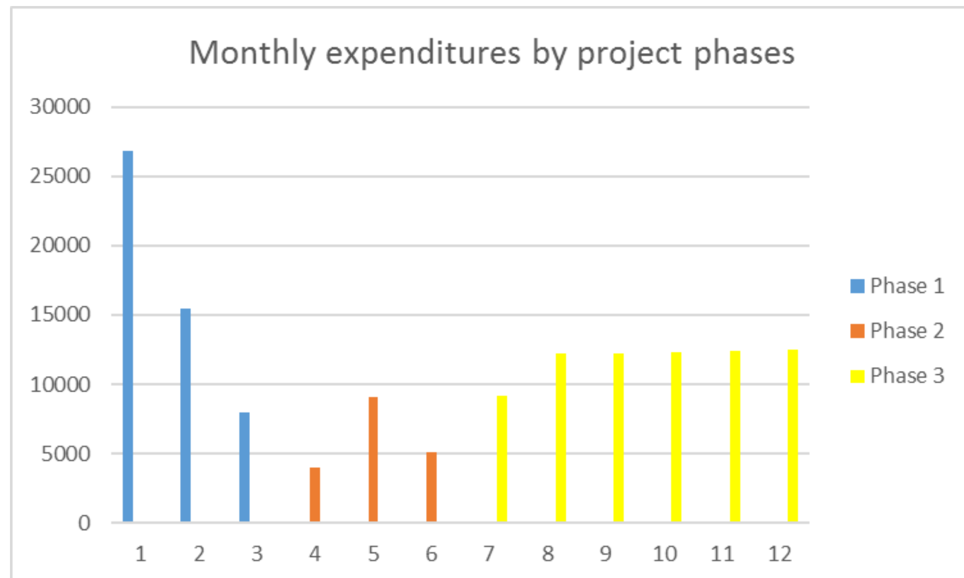

FIGURE 8. Case company's monthly expenditures

The figure above (figure 9) shows how the expenditures are divided in the phases. First phase’s expenses include coding beta version and development, creating tournament module, purchasing gaming platform and payment solutions, acquiring Curacao license, setting up Malta trading company and purchasing an application for eSports.

Coding beta version means the mobile application development and keeping the version updated for customers. A tournament module is a new form of gaming that can not be purchased ready, so its development requires funds on development stage. Curacao license is a license that is required for gambling companies to operate. Payment solutions are needed so a customer can deposit money into the mobile application and withdraw money from it. Applications for esports are purchased from a third-party company to provide odds for esport matches.

Second phase expenses include preparing white label solutions and applications for other sports. Applications for other sports are also purchased from a third-party company to provide odds for other sports than esports. The application used in this phase is basically the same that

has already been developed in the first phase, so the expenditures in the second phase are the lowest compared to other two phases.

Third phase’s expenses include development costs, and marketing, office costs, and salaries in Malta. The mobile application needs further development because company x is trying to get the application available on mobile stores like Play Store for Android phones and App Store for Apple phones. Mobile store cost includes publishing fees for application on these stores. Until this point, the company's only marketing has been via white label products. On the third phase, the company will expand marketing and be advertising the product under their own brand name. At this point company will need personnel and office in Malta, which will cause expenses such as salaries and office costs. Company’s marketing efforts and personnel additions raise expenditures on the third phase.

5.2 Profitability calculations

The case company has only one product which is betting on sports. The revenue model of betting companies is simple, the odds to any given game have a built-in profit margin. The figure below shows in a simple coin toss example how a betting company’s profit margin works.

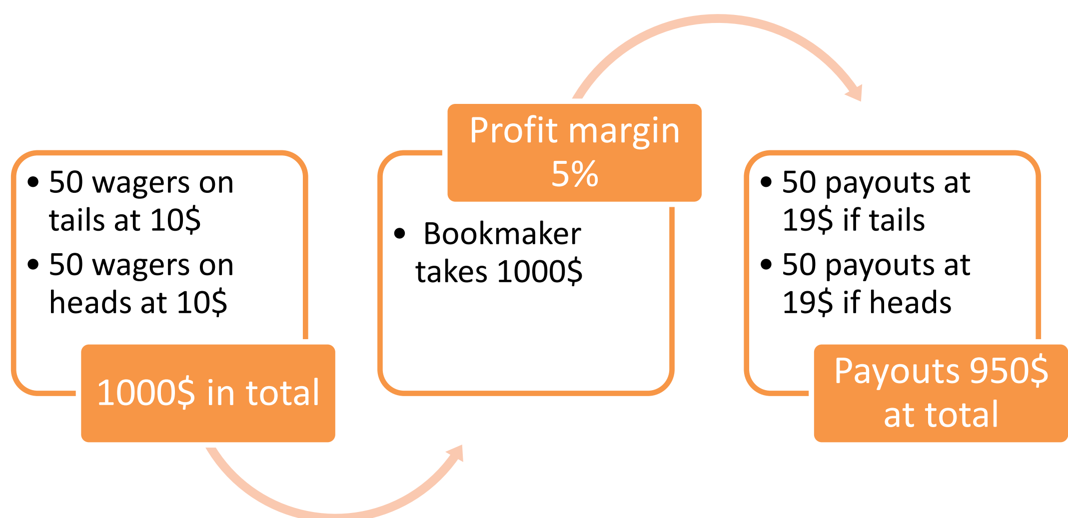

FIGURE 9. Betting company profit margin example

As the figure above (figure 10) shows the bookmaker is making a profit on every toss of the coin and in this case, the bookmaker's profit margin is 5%. In actual sports event, the profit margin is not as simple to calculate the possible outcomes aren't usually equally likely, but the principle stays the same. (Gamblingsites 2018.)

In this case, profitability calculations are estimated with three variables: number of customers, average revenue per paying user and affiliate marketing commissions. Sales targets are calculated on monthly basis for twelve months. These profitability calculations also show break-even point and serve as a basis for the cash flow statement.

5.2.1 Number of customers

The number of customers is the only changing variable in these calculations. First paying customers are estimated to start using the application after three months of beta testing and development of the application. After fourth month the number of customers is estimated to grow at a constant rate. The growth of customers is a result of increased marketing efforts.

The constant growth rate used in these calculations is 50% per month after the 3-month developing period. After developing period there is estimated to be 500 paying customers at the beginning of the fourth month and after that, the number of players is growing at the constant rate. With this rate, there should be nearly 13 000 paying customers after the first year.

There were seven million active online gamblers in 2014 and the number is growing every year according to the European Commission (European Comission 2017). Company X’s target number of customers after the first

year is 13 000 customers which is less than 0,2% of active online gamblers in Europe.

5.2.2 Average revenue per paying user

Average revenue per paying user (ARPPU) is the average revenue received from company's paying users. In these calculations, arppu is estimated on monthly basis. Estimated arppu stays constant through the calculations. Average revenue used in these calculations is 15 euros per paying customer in a month.

Estimated revenues of the gambling industry in 2015 are 13 billion euros. With 7 million active players the average revenue per customer is 1860 euros per year and 154 euros per month. (European Comission 2017). Company X target revenue per paying user is 15 euros per month which are 9,74% of the average paying user's consumption.

5.2.3 Affiliate marketing and revenue share

Affiliate Marketing is a result-based marketing model that only pays for the actual goals. The target may be, for example, an online shop purchase, a registration for a web service, a contact request or a newsletter subscription. (Investopedia 2018f). The company x uses affiliate marketing via esports teams and organizations. The target is to get paying users to the application and the marketer gets paid from the revenue created by these users. Affiliate percent is the amount of revenue that goes to the marketer.

In these calculations, the affiliate percent is 50% and stays constant through the calculations. There is not official affiliate percent yet because it can vary according to the contracts made between parties.

5.2.4 Break-even analysis

The break-even point calculation of the case company is based on the number of customers because the average revenue per customer and the affiliate percent is kept constant through the calculations. As the table below (table 3) company needs on average 2060 monthly paying users to break-even in the first year.

TABLE 3. The company x's break-even point

Breakevenpoint 12months (customers)	Cumulative Costs / ARPPUxAFF%xMonths	2060	customers

If the case company's customer base grows as planned the breakeven point of the cumulative costs and cumulative revenues at 10. month. The customer growth is the key to achieve this breakeven point and the company is expecting 50% customer growth per month. If the customer growth rate is for example 40% the breakeven point is pushed to 11.

month. The figure below (figure 12) shows three different cash flow predictions with three different customer growth scenarios.

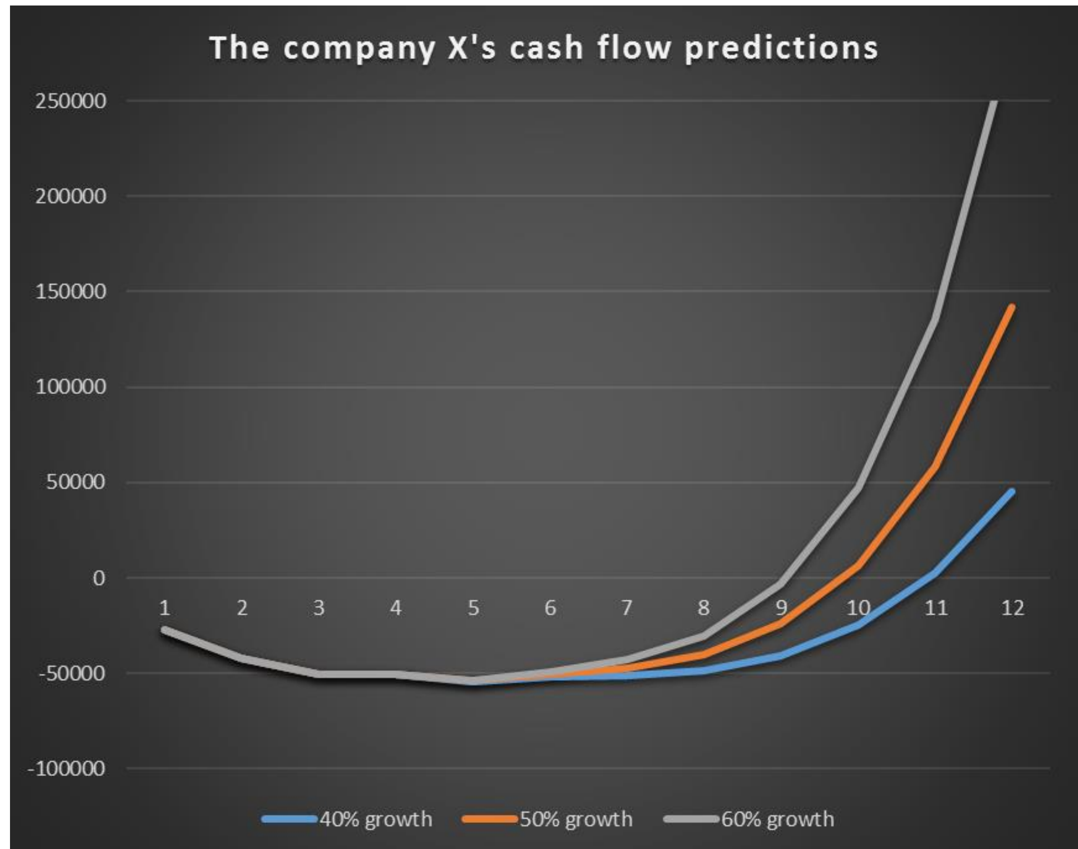

FIGURE 10. Company X's cash flow predictions

Cumulative costs and cumulative revenue shows the company's cash flow on monthly basis. The lowest point of cash flow statement is the least amount funding needed by the company. For the first ten months, the company X's cumulative costs are more than cumulative revenue, so the company will need external funding to keep the company operating. The company X's estimated cash flow statement hits the lowest point at

roughly in the sixth month which means that the company needs external funding at least the amount of the lowest point of the cash flow statement.

5.3 Sales calculations

The expenditures have been allocated by the phases discussed in the chapter earlier. Most of the expenses were fixed expenses because the product is non-tangible application, so it made more sense to allocate the expenses by the phases. The only variable cost, in this case, is the virtual servers which are correlating with the number of players. The figure below (figure 13.) shows monthly expenses (blue bars) and monthly revenue (orange bars).

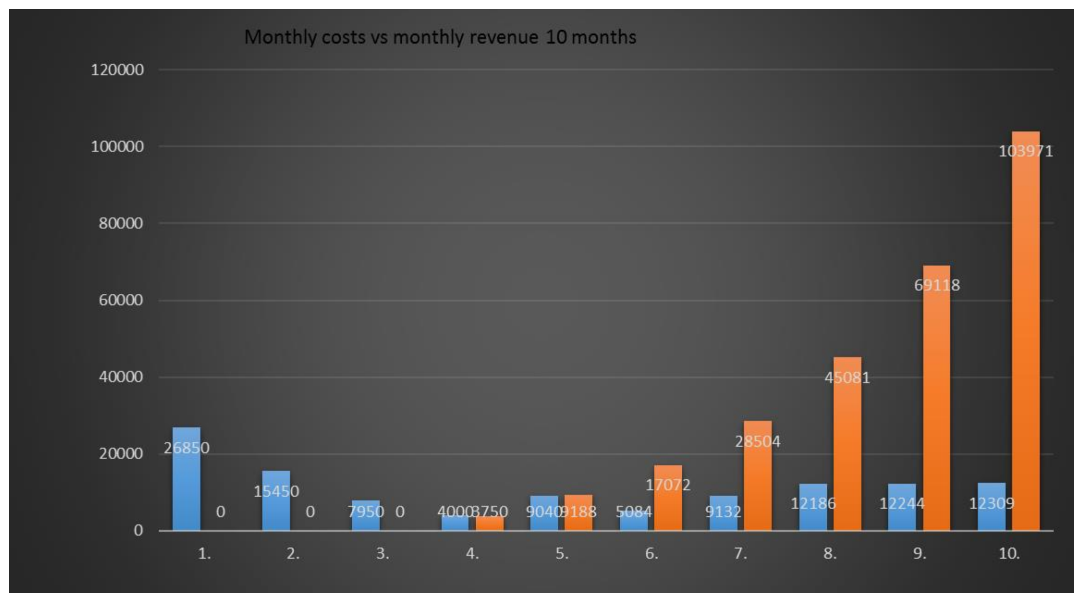

FIGURE 11. The case company's monthly costs and revenue

In the first three months (first phase) the company is not generating any revenue. The second phase starts at the fourth month and first paying

customers are expected to use the application. The third phase starts at the seventh month and the revenue generated is expected to increase monthly because the number of players is growing due to increased marketing efforts.

6 FINANCING

Company X founders need external capital to finance the company. Because Company X is a betting company and it is going to be set up on Malta, financing possibilities are very limited. The company can not receive any financial support related to start-ups or entrepreneurship from Finland’s public sector. The private section is the only possible way to finance the company X. Commercial banks and venture capitalists are unlikely to invest in a start-up which is in its early stage and the risk of the investment is high. Business angels and crowdfunding are most the plausible sources for the company to get financial support. The founders of the case company need to decide whether the company is going to raise money from business angels or with crowdfunding. The table below (table 4) shows some pros and cons for each type of financing option.

TABLE 4. Financing options for the case company

	Business Angels	Crowdfunding
Pros	Invest in high risk companies	Invest in high risk companies
	Investor Brings experience	Good way to market the product
	Does not require existing revenue stream	Does not require existing revenue stream
Cons	Company needs to give up equity	The business idea can be copied by other company
	Founders may have to give up decision making power	Reaching required amount of funding can take a long time or may not be reached at all
		Company may need to give up equity

The founders would prefer to finance the company with business angels because it would be easier than setting up a crowdfunding campaign. Business angles are known to invest in high-risk startups with growth potential and Company X is in that category. A business angel could also bring valuable experience to the company. In return for the investment, business angel wants a share of the company so the founders must give up part of the equity. With the equity, the founders may also have to give up decision-making power.

If the company can not get funding from business angels, the other option is going to be crowdfunding. In that case, the company must set up a campaign on one of the crowdfunding platforms. The disadvantage of this approach is that it is hard to estimate how long does it take to reach the necessary funding and there is no guarantee that the funding will succeed. This can be harmful to the company's launching schedule. There can be additional fees for the completed crowdfunding campaign depending on the crowdfunding platform. Crowdfunding platforms are usually public and

there is a risk that the business idea can be copied by an already existing company if the product or service does not have or cannot be patented. For example, if a campaign is successfully funded on a platform called Kickstarter, Kickstarter will collect a 5% fee from the final funding total (Kickstarter 2017). On the other hand, crowdfunding would be a good way to market the product. Crowdfunding process brings publicity to the product and to the company because it would be publicly available on a crowdfunding platform and any individual interested could invest.

At the start, revenue-based financing is an unlikely candidate to invest in a start-up which won't have an existing revenue stream. Revenue-based financing could be financing option when the company is already generating revenue and needs funds to expand and create growth.

7 CONCLUSION

The conclusion in general level is that the turnover of gambling industry has grown strongly in Europe in recent years and is likely to grow further in the future. Development of smartphones and constant internet connection makes online betting sides and casinos easy to access. These general indicators give Company X's product a positive forecast to succeed. The challenge is can the Company X stand out from its competitors which number is also growing.

Company X preliminary profitability calculations show that more detailed cost calculations should be made before the final amount of funding is decided. The case company's cash flow predictions show that the possible changes in the variables that define the growth could move the break-even point drastically and affect the amount of funding required. Better consultations with, investors and potential partners can provide additional information on these cost statements.

The conclusion is that, as such, the company's objectives meet the objectives set, and the business is profitable. However, at this point, it is impossible to calculate accurate profitability calculations. Investors' rate of return and founders own profit targets are just estimates at this point and can and probably will change when the company is up and running.

For further research, the following study could be related to the company's actual costs and their comparison with these estimated costs. How much do they differ from each other and to what extent? Was the launched product ultimately worthwhile or not?

8 SUMMARY

The case company had cost calculation predictions for the first year of the start-up. This study found out what are profitability possibilities, sales calculation predictions and financing needs with the given cost calculations. Profitability calculations of the case company consist of three variables: number of customers, average revenue per user and affiliate percent. Profitability calculations of this study show different growth predictions for the case company and what kind of growth in customers should be achieved for the business to be profitable.

Sales calculations were based on the cost calculation estimate and the profitability calculations. Sales calculations show that the company is starting to generate revenue after three months of operating. The fifth month is the first month that the company makes a profit. The study shows that the case company needs financing because the first four months are unprofitable. The amount of funding needed was calculated and the financing possibilities were reviewed from the case company’s point of view. Most suitable financing options for the case company were business angels and a crowdfunding. Founders would prefer to get funding for the company from a business angel, because it would be quicker process and safer option compared to crowdfunding.

At the beginning of the thesis, it was difficult to decide and limit the content of the work. I have learned and received a lot of information about entrepreneurship, what are the things one should consider when starting a company.

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ATTACHMENTS

Company X’s sales calculations

Company X’s cash flow predictions

Company X’s monthly expendures

Company X’s Income statement predictions

Company X’s profitability indicators