Business Plan

Lean consulting company in the software engineering industry

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ABSTRACT

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The objective of this Bachelor’s thesis is to create a feasible business plan with realistic projections for a lean consulting company located in Tampere, Finland. The company will operate in the software engineering industry.

The company would provide a consulting service mainly to small and medium enterprises (SMEs) in order to improve their production efficiency, reduce costs and create value.

The company will specialize in lean and its major related concepts in order to provide thorough, professional service. Lean as a concept can be applied to any company and thusly the consultancy company can provide its service to virtually any customer.

This thesis also details the projected financial plans for the business, as well as future plans, which involve expansion into new fields.

The thesis will start with the theoretical framework of entrepreneurship, lean and its major related principles and move on to the creation of the actual business plan detailing its contents and various analyses to examine the plan’s feasibility. The closing chapter will draw conclusions regarding its feasibility for implementation.

Key words: business plan, lean, consultancy
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1 INTRODUCTION

1.1 Background

This Bachelor’s thesis is a business plan for a lean manufacturing consulting company in the software engineering industry. Software industry is of extreme importance today. Most everyday activities today are controlled by computers which have made our lives dramatically easier. Naturally computers require software to control the various tasks it performs such as an elevator taking you to the correct floor, radars on airplanes or various sensory systems in modern vehicles. All these examples are controlled by a micro-processor which follows the paradigm it has been coded to perform. Ever since computers started developing and penetrating our everyday tasks software and its development has become increasingly important. This has led to the rise of software development companies all over the world. Due to the quick advancement of technology over the past few decades the expectations of people using it has also increased. Companies developing software have their priorities set in the development of new software and they may disregard the importance of operations optimization. This is the point where the proposed business plan comes in.

The proposed company would offer a range of consultancy services to companies operating in the software engineering industry. The main product is the service to improve the customers’ operations through concepts and principles of Lean software development adopted from the Toyota Production System (TPS). The ideal end result is a more efficient, streamlined production for the customer.

The reason I chose this particular subject was due to an enlightenment I experienced during my student exchange period in Portsmouth, England. While there I had multiple lectures regarding the principles of lean, its functions and effects. I found this subject particularly interesting and chose to develop a business plan as my bachelor’s thesis based on what I learned during my exchange period. The main purpose is to create a business plan that is feasible and serves as a source of necessary information for the establishment of the business in question. As a consultant, my goal is to make the lean transformation process as easy as possible for the customer.
The main questions for this thesis are as follows:

- What is the product/service offered?
- Is the establishment of the company in question feasible under current economic circumstances?
- Is writing a business plan necessary?
- Does the business idea have potential for success and growth?

The data used for theoretical discussion was collected from various literal sources such as books and internet articles. Analysis for the research questions is conducted through discussion based on projections of the established business’ performance while taking into account the status quo.

The thesis is constructed from four parts. The first part is the theoretical framework in which the definition of entrepreneurship is explained and further elaborated by the encompassing mindset. This is followed by the concept of lean and the primary principles often associated with it. Finally the main aspects of a business plan are detailed. The second part involves the business planning with executive summary, organizational plan and marketing plan. The third part is constructed of the financial planning listing general assumptions, balance sheet, three year plan and a breakeven analysis. The thesis is concluded with the future plans chapter, which discusses potential growth and expansion possibilities for the business.

Due to the scope of a business plan in general and the wideness of the topic, this thesis was limited to a single industry and accommodated into its capacity, which is in this case software engineering. The relevant information was evaluated by the author and included if found to be necessary.


2 THEORETICAL FRAMEWORK

To fully understand how to establish a successful business, one must first understand the encompassing theory. The business is built on the knowledge of these theories and it is necessary to fully understand them in order to unleash the true potential of the business. Theoretical framework for this Bachelor’s thesis will consist of entrepreneurship and its main concepts, lean and its related concepts, lean software development and business planning. Essential definitions will be included to properly explain the concepts in question. The following sections will explain the theoretical framework which is the foundation of the business plan. Information from literal sources are also included as are some of my personal comments.

2.1.1 Entrepreneurship

It can be said that there are two kinds of people: people who lead and people who are led. Entrepreneurs are the former. They are a special breed of people who choose to forego typical employment for someone and instead work for themselves. This may sound very attractive and maybe even easy to some. It is quite the contrary.

The word entrepreneur is derived from the French word *entreprendre*, meaning “to undertake.” The entrepreneur is one who undertakes to organize, manage, and assume the risk of a business. In recent years, entrepreneurs have been doing so many things that is now necessary to broaden this definition. Today, an entrepreneur is an innovator or developer who recognizes and seizes opportunities; converts those opportunities into workable/marketable ideas; adds value through time, effort, money or skills; assumes the risks of the competitive marketplace to implement these ideas; and realizes the rewards from these efforts. (Kuratko & Hodgetts 2001.)

The mindset of an entrepreneur is special. It is much more than simply forming a business. He cleverly states: “The characteristics of seeking opportunities, taking risks beyond security, and having the tenacity to push an idea through to reality combine into a special perspective that permeates entrepreneurs.” Entrepreneurship is a dynamic process of vision, change and creation that combined with effort to form ideas and solutions. (Kuratko 2011.)
The entrepreneurial process focuses on varying inputs which lead to outputs. The following model displays the input-output model and identifies the key elements to each contribute to the process. The first element is the environmental opportunities, such as the demographic change or the invention of new technology. Next is the individual entrepreneur who takes the responsibility for conceptualizing and implementing a new business venture. This means developing a business concept which capitalizes on an opportunity. Usually this comes in the form of developing a solution to meet a customer’s need. This type of business implementation typically requires some type of organizational context, which range from sole proprietorship to a unit within a large corporation. Finally a range of financial and non-financial resources are required on an ongoing basis. These key elements are combined over the stages of entrepreneurial process. (Morris, Lewis & Sexton 1994.)

The output components of the following figure first identify the entrepreneurial intensity. Thus, the process can result in any number of entrepreneurial events that vary considerably in terms of how entrepreneurial they are. Based on the entrepreneurial intensity, final outcomes can include one or more ventures, value creation, new products and processes, technologies, profits or economic growth. The final outcome is also often a failure including the economic, psychic and social costs corresponding with failure. (Morris, Lewis & Sexton 1994.)

The model provides a fairly comprehensive picture regarding the nature of entrepreneurship, but it can also be applied at different levels. At the organizational level the figure displays entrepreneurship for both independent startup ventures and the venture developed within a larger strategic business unit of a corporation. The input-output perspective is also applied for organizations with a non-profit approach where the outputs take a different interpretation, such as the creation of social value. (Morris, Lewis & Sexton 1994.)
As stated above entrepreneurs are people who see the world in a different manner. They see opportunities which they choose to take. They see the potential in ideas that can grow into something greater than it currently is. They choose to take the risk associated with pursuing these opportunities which sadly, often lead to failure. Entrepreneurs are by far the driving economic force in our contemporary society.

### 2.2 Lean manufacturing

Lean as a manufacturing philosophy has been designed to systemically eliminate waste within a manufacturing process. In essence this means using eliminating excess everything compared to typical mass production; less human effort, less manufacturing space, less engineering time for developing new products. Lean was mostly derived from Toyota Production System (TPS) and it is known for focusing on reducing Toyota’s “seven wastes” in order to improve customer satisfaction. According to TPS, waste in a process is any activity which does not move the product closer to completion or add value to the end product. The seven wastes are the following:
1. **Overproduction** - manufacturing an item before it is needed. Overproduction is costly to the company because it prevents smooth flow of materials and degrades quality and productivity. This is considered the worst “waste” since it hinders and/or generates the others.

2. **Excess inventory** – increases lead times, consumes floor space, delays problem identification and communication.

3. **Waiting** – whenever goods are not moving or being processed the waste of waiting occurs. Much of a product’s lead time is tied to waiting for the next process and is usually caused by poor communication and material flow.

4. **Transportation** – incurs costs that do not add value to the product in any way. Excessive transportation may cause damage decreasing product quality.

5. **Unnecessary motion** – compared to transportation of materials motion means the movement of the producer, worker or equipment potentially causing fatigue, damage, wear and damage issues.

6. **Over-processing** – using more resources than necessary for the task or adding features that are not needed by customers. Also promotes overproduction to recover the equipment’s costs.

7. **Defects** – quality defects affect the business bottom line, resulting in rework or scrap and associated costs such as quarantining inventory, inspecting and capacity loss. (Wang 2010.)

Lean has fascinated especially the manufacturing industries due to its high benefits. It’s numerous boosts include up to 90% reduction in lead times, up to 75% reduced inventory and working capital and 25% improved productivity just to name a few. These improvements alone are a reason enough to invest in lean but through quicker deliveries and higher quality products companies will increase their competitiveness which can lead to higher market and share and profits. (Hobbs 2011.)

Differentiation is one of the main reasons why customers choose to buy products or services from specific companies. He also states that companies that approach and adapt lean as a differentiating factor have a competitive advantage. Successfully adapting lean gives your company differentials and it is these differentials that define what makes the lean company better than the others. In a fiercely competitive world having these differentiating factors might just be the key in determining a company’s success. (Hobbs 2011.)
2.3 Primary concepts associated with lean

The following chapters will explain the primary concepts often associated with Lean. These concepts detail how lean functions on a fundamental level and how it affects everyday operations. The consulting company will utilize knowledge of these concepts to better understand how the customer’s operations function in their current state and then improve them using these principles.

2.3.1 Six Sigma

Six Sigma is a methodology that strives to understand and eliminate negative effects of variation in processes. Six Sigma uses a problem solving model with utilities and statistical process control tools, one of which is the Define-Measure-Analyze-Improve-Control (DMAIC) map helping to understand and improve organizational challenges. (Goldsby & Martichenco 2005.)

In essence Sig Sigma is the principle of variation reduction: understanding and reducing variation in processes allows the implementation of improvement initiatives that center processes and ensure accuracy and reliability of the processes around customer expectations. (Goldsby & Martichenco 2005.)
The following figure displays a model giving a better understanding of the Six Sigma DMAIC-control map.

![Six Sigma DMAIC control map](image)

**FIGURE 2. Six Sigma DMAIC control map.** (Lean Six Sigma Logistics, 2005, modified)

It can be said that to successfully implement Six Sigma one must understand the possible variations that affect processes and focus on eliminating their variations. Some variations cannot be controlled but most are and come in multiple flavors:

- Part variation: piece to piece, raw material lot to lot.
- Human variation: operator to operator, supervisor to supervisor, number of tasks performed in a process, working conditions, skill and experience levels, information accuracy.
- Tool variation: wear over time, computer to computer etc.
- Time variation: hour to hour, day to day, week to week, country to country.

(Burton & Boeder 2003.)
2.3.2 Kanban

The Japanese word kanban translates as “signboard,” which has become synonymous with demand scheduling and its roots go back to the early days of Toyota Production System. Kanban was developed to control production between processes and implement Just in Time (JIT). Thanks to these implementations Toyota managed to minimize work in process between processes and reduced costs associated with inventory holding. Kanban has seen development since its inception and today it is used to not only manage cost and flow, but also identify impediments to flow and opportunities for continuous improvement. (Gross & McInnis 2003.)

Kanban is defined as demand scheduling. In processes controlled by kanbans companies produce products based on actual usage rather than forecasted demand. This means only producing a product to replace one consumed by customers or based on signals by customers. Kanban scheduling does not replace material planning, but takes its information to create the kanban. Daily scheduling activities needed to operate productions are replaced as is the need for continuous monitoring of schedule status. Thusly, the implementation of kanban allows material planners, schedulers and supervisors to manage exceptions and improve processes. It can be said that kanban directs production on a day-to-day basis. (Gross & McInnis 2003.)

2.3.3 Value stream mapping

A value stream is all the actions (both value added and non-value added) currently required to bring a product through the main flows essential to every product. This includes:

1. Production flow from raw material to the customer.
2. Design flow from concept to launch.

In essence, value stream mapping is a tool for analyzing the current state, and also designing a future state for information and material flow. The map details all the stages that deliver a product or service from its beginning to the end customer. Value stream mapping requires one to focus on single a single product or service at a time. The first step is to draw a map of the current situation done by gathering information from the
shop floor detailing all the stops and information flows required to deliver the end product. The next step is designing the future state map which details how to get to the ideal value stream situation with less waste. The future map is constantly revised and improved upon based on analyses done regarding the value stream. (Rother & Shook 2003.)

When taking a value stream approach, it is imperative to work on the big picture. This means improving the entire process, not just optimizing individual parts. Value stream mapping helps see and understand the flow of materials and information through the value stream. (Rother & Shook 2003.)

A properly designed value stream map induces many benefits:

- Visual representation of the entire material and information flow for the current state value stream.
- Identifies links and connections between information and material flow.
- Identifies sources of waste in value stream and forms a basis for its removal.
- Provides common language for processes.
- Identifies non-value added steps, lead time, travel distance and amount of inventory for a process.
- Provides common language for discussing future state value stream and identifies gaps between current state and future state.

(Burton & Boeder 2003.)

2.3.4 5S

5S is the methodology of creation and maintaining a well-organized, clean, efficient and high quality workplace. Its result is the reduction of work’s environment, elimination of losses connected with failures and breaks and improvement of quality and safety of work. (Michalska & Szewieczek 2007.)
As stated in [http://www.epa.gov/](http://www.epa.gov/), the 5S is usually the first lean method companies choose to implement. It originates from Japan and its five fundamental pillars are Sort (Seiri), Set in Order (Seiton), Shine (Seiso), Standardize (Seiketsu), and Sustain (Shitsuke).

- **Sort** focuses on eliminating waste and unnecessary items from the workplace that do not contribute to production processes. Unnecessary items such as scrap, broken tools or excessive raw materials are moved to their proper holding areas for either disposal or reassignment.

- **Set in order** focuses on efficient storage solutions to arrange items so that they are easy to find or put away. Set in order can only function properly after the first pillar, Sort, has cleared the working area of all unnecessary items. Set in order strategies include, but are not limited to: installing modular shelves, outlining working areas and locations, setting labels to designate storage for items.

- **Shine** refers to cleaning which is done after the working stations have been cleared and excess items stored or disposed. Cleaning is a process that should be done daily to maintain the improvement. Working in a clean environment allows employees to notice defects and mistakes easier.

- **Standardize.** Once the first three pillars have been successfully implemented, the next step is to standardize all the best practices in the working environment. Standardizing means creating a consistent approach with which tasks and procedures are done. It is a step to maintain the first three pillars by integrating the procedures done to reach the new status quo into regular work duties.

- **Sustain** means maintaining the current situation after the implementation of the first four pillars is successful. Without the sustain pillar in place the other pillars will crumble quickly, which is why sustaining the new status quo is arguably the most difficult pillar to achieve. Proper discipline keeps the 5S pillars in check and functional.
Most businesses today have adopted the 5S in one form or another. Some of them have also done it without even realizing the lean concept behind it. I have followed these principles in my personal life for years without initially realizing that there was a fully developed concept behind it. I firmly believe that understanding the 5S concept is a key feature in taking a company toward the lean approach. Once companies understand that lean is not all as complicated as it may sound like, more companies might be interested in adopting more of its principles into their operations.
2.3.5 Lean software engineering

As mentioned earlier, software engineering has become increasingly important due to the rapid advancement of technology. Software engineers strive to create products to match customers’ expectations and needs in a rapidly developing market.

Lean software development is fundamentally the same as lean manufacturing, only with the main principles adapted into the specific industry. The pioneers in this movement were Mary and Tom Poppendieck (2003) who discussed adapting the lean way of thinking and detailed the adapted principles of lean software development. These principles are:

1. **Eliminate waste.** This principle is very similar to the original lean principle; anything that doesn’t add value is considered waste. Waste in the software engineering industry could be unnecessary lines of code, delayed processes and products and poor communication for example.

2. **Amplify learning.** Software development is a challenging process where engineers must meet the ever increasing demands of the customer. This means that the entire process of product development is a constant learning experience. “Development is like making a recipe, while production is like making a dish.” The authors both emphasize that amplifying learning is the best way to improve the software development environment.

3. **Decide as late as possible.** Delaying decisions is valuable because better decisions can be made when they are based on fact not speculation. This is especially true in software development where uncertainty during development is high.

4. **Deliver as fast as possible.** Rapid software development has become more appreciate in the recent years. Previously the more careful and slow approach was common practice to avoid mistakes but the benefits of rapid development has since overtaken it. In development the discovery cycle is critical for learning: design, implement, feedback and improve. The shorter the cycle the better the learning curve. In a fiercely competitive world customers also appreciate and expect quick product delivery.

5. **Empower the team** reverses the traditional setting where employers tell the workers how their jobs should be done. In this situation the managers listen to the developers to better understand what changes should and need to be made.
6. **Build integrity in.** Integrity comes in two forms, external, perceived and internal, conceptual integrity. The perceived integrity means that the product functions according to the customers’ expectations. Internal integrity refers to the system’s separate parts’ conceptual functionality as a whole.

7. **See the whole.** One of the principles of lean is to optimize the entire value stream, not just a single part of it. Optimizing all smaller parts of the system allows the root of defects to be found with more ease.

(Poppendieck & Poppendieck 2003, 24-27)

Overall, the lean software development principles are very similar to the original lean principles. It is imperative to properly understand both principles to provide a thorough service.

Unfortunately, there are a few issues in the lean principles of software development. My personal main complaint is based on the fourth (4.) principle *deliver as fast as possible.* As an avid consumer of software coming in numerous forms, I have learned that this principle has turned into common practice leading into issues on the user end. More often than not, I see new software having multiple issues, which in the worst cases prevent proper use of the software altogether. While I understand the issue and principle behind the method, I question the quality it produces to customers. Unfinished products released on a regular basis may teach customers to avoid your products and opt for another company’s product instead. Naturally, the issues with unfinished products can be corrected by updated after release, but the damage may already have been done.
2.4 Business planning in theory

The following chapters will elaborate on the importance of a written business plan detailing its purposes and major contents.

2.4.1 Why is a business plan necessary?

Pinson (2004) states that, all businesses, large or small, will greatly benefit from a carefully planned and written business plan. A business plan also serves as some documentation for investors which creditors often require if and when a business is seeking outside financing.

1. **To serve as a guide for your business.** First and foremost, the business needs a guide that you can follow throughout the lifetime of your business. The plan provides you with the tools and information required to analyze implement changes that can make your business more profitable. This is why business plans need to be kept up to date with new and changing information.

2. **Documentation for financing.** A proper business plan will detail how much the financing will benefit the business invested in. All investors want to know how cash flow is managed and debts paid. Realistic statistics and reasonable projections can persuade investors to provide you with the financing you seek.

(Pinson 2004.)

2.4.2 Contents of a business plan

Business plan consists of a few important pieces that give it its form. The initial pages is known as the executive summary which will in a concise manner answer the following questions:

- Who?
- What?
- Where?
- When?
- Why?
- How?
In essence, the executive summary quickly summarizes the content and purpose of the business. (Pinson 2004.)

The first major section of the business plan details the organizational plan of your business. The organizational plan covers the description of the business and its products, services and administrative setup – the details how the company is established in a cost efficient, effective manner. In addition to the aforementioned, it includes information pertaining intellectual property, location, legal structure, management and personnel, accounting and legal, insurance and security. (Pinson 2004.)

The next major section is the marketing plan which details market analysis, sales strategy, advertising and public relations. These are not all required if the business is small, and the entrepreneur should consider what parts fit the scope of the business. (Pinson 2004.)

The final major part are the financial documents. These documents are used to detail the past, current and projected finances. Some of the major financial documents that should be included are:

- Summary of financial needs
- Income statement
- Three-year plan
- Breakeven analysis

(Pinson 2004.)

Kuratko & Hodgetts (2001) cleverly state that the point of a business plan is to emphasize the final implementation of the business, which means turning the start up into a successful enterprise. All decisions must be made with this goal in mind.
3 BUSINESS PLAN

3.1 Executive summary

The plan is to establish a consulting company in Tampere, Finland for lean software development which offers its services to software engineering companies looking to adopt lean methodologies into their operations. The company offers its consultancy services to all companies operating in the industry that are interested in improving their company’s performance. The customers’ benefit from the service is the optimized processes and streamlined operations that will improve the productivity and capabilities of the customer company significantly. While the company could technically operate without offices initially, business premises are still preferred. There are several leasing opportunities available in the Tampere region.

Once properly established and setup the company will be interested in expanding into other industries to further its cause. Within 5 years of its establishment the company is seeking to be a significant entity in the local consulting business.

3.2 Organizational plan

The business offers consulting services for businesses operating in the software development industry that are interested in adopting lean development methods into their everyday operations and processes. These consultancy services will the primary product of the business. The business will instruct the customer in the ways of lean thinking and methodologies so that they properly understand what steps need to be taken to optimize their processes. The following types of companies are the customers we try to attract:

- A small to medium-sized, established software development company looking to improve its performance.
- A company that is satisfied with its current performance but doesn’t realize more potential is unlockable through new ways of thinking.
The service comes in the form of training which can be done as contact teaching and/or online teaching. The training will detail major aspects of lean and just how much adopting its principles into everyday operations can improve the customer’s performance. The service will include visits to the customer’s business premises in order to fully assess the customer’s situation and provide a more thorough service. The actual training will vary depending on the audience and different sessions will be held for both management and employees. The training offered for management offers a different perspective telling key points about changing leadership ways while employees will benefit more from the “hands-on” approach describing how lean and its principles manifest in everyday operations.

Excellent customer relations will be one of the key focuses of this company. This is mainly due to the nature of consulting business in general and how closely you are in contact with other people. The lean coaching will be conducted together and separately by my co-founder partner and me.

An important aspect about the service is that the customer can choose what areas of their business they want to focus on and the service will be tailored accordingly. The customer can for example be interested in adopting the early steps of lean in the form of 5S. Our company’s focus is to help the customers in the areas they find most appropriate.

3.2.1 Mission statement

The mission of the business is to raise awareness of lean in the industry and help streamline and optimize the customers’ operations and processes, which will lead to overall increased productivity.

Long term plan involves growing into a respectable entity in the consulting business. This will be done by expansion into other fields later on, but initially the business will focus on software development companies. The focus on software development makes the business plan unique in local consulting business. The long term plan can be realized by managing to increase the awareness and demand for our service
A website for our company will be developed and updated by co-founder partner who has expertise in the area which allows us to avoid the cost of purchasing an outsourced one. A separate domain will have to be purchased to host the domain which will incur minor expenses. The website will be an effective way to find key information about the services and contact the company for feedback and place inquiries or orders.

3.2.2 Legal form

The company will be setup in co-operation by my personal friend, Tapio Vuorinen and me who will be the only personnel in the company initially. We both share similar expertise in the field of business and have equal enthusiasm which will be key in our company’s success. We have come to the conclusion that a corporation will be the most suitable form for our company. This is mainly due to the fact that it has less personal financial risk due to the fact that the company is held liable for its liabilities instead of the people working for it.


According to the Finnish Business Information System, the registration of a new venture can be done online for a cost of 330€. ([https://www.ytj.fi/](https://www.ytj.fi/), n.d.)

It goes without saying that a corporation is much more difficult to setup and maintain. A board of directors must also be elected, shareholder’s meetings must be held and as with every other type of company, the trade register must be notified of the newly established business within three months of the establishment contract signing or the contract is invalid. It should be noted that taxation planning is somewhat easier with corporations as is marketing due to the social status of a corporation.

A considerable amount of work goes into establishing a corporation in Finland, however, we consider that a corporation is the right form for our company despite its more complex nature.
3.2.3 SWOT analysis

The following figure details the company’s SWOT analysis, (Strengths, Weaknesses, Opportunities, Threats) which examines some of the key internal and external factors to the business. The SWOT analysis enables a business to focus its attention to the areas that need improvement to reduce risk and concurrently identifies its greatest strengths and opportunities which may give a competitive advantage.

**FIGURE 4. SWOT analysis.**
3.3 Marketing plan

3.3.1 Market analysis

Consultancy services today are plentiful and most companies provide their services across multiple fields. This increases difficulty when trying to penetrate the market, but the unique business model alleviates this issue.

There are two competitors operating in the Tampere region offering similar services. They have been operating for some time now, are well established and have long experience in both lean and the consulting industry. However, the key advantage the proposed business plan has is that it is initially oriented toward the software engineering industry. The competitors in question offer a more general approach and fail to specialize in any given industry. This gives a competitive advantage for the business. There are multiple companies operating in the industry within the Tampere region increasing the amount potential customers.

Our company’s target market will be virtually any software developing company that is interested in changing their ways of thinking and seeing new results as a consequence. There will be no set demographic but the most likely customer is a new start-up that is looking to optimize its processes from the very beginning.

The current industry trend is the increasing adoption of lean due to the fierce competition and attempts to reduce costs while maximizing profits. This has led to the point when companies’ operations are very well setup and they are now looking for new ways to improve their position through various means. Lean gives a method of reaching new states without having to lay off personnel or increase product prices.
3.3.2 Marketing strategy

The marketing resource allocation will likely be 70% online versus 30% offline marketing. This is considering the fact that traditional offline marketing such as printed sources and radio or television advertisements are significantly more expensive and considering our limited resources. This means that the more cost effective way to advertise our new services is through online website advertisements and banners. Considering how rapidly smart devices have spread and how much people use these devices on a daily basis has led to the importance of online prevalence well-made websites. The primary way of reaching customers will be our website through which customers can place orders or inquiries by e-mail or telephone.

When considering pricing one must first consider a number of things. This includes the following:

- Economic value of the product
- Production costs
- Competitor price levels
- Overall price elasticity of demand

Since our company offers a service it technically does not cost anything to produce, however the material containing the information key to this product will cost man-hours and will require resources to create all the suitable material for customers. This material is necessary in teaching the customers.

The company will mostly match the competitors’ prices but due to the nature of the services they are negotiable. It is likely that the price elasticity of demand is elastic in our service’s case, making the product more desirable for customers when lowering the price. However, the pricing strategy cannot be overly aggressive as profits are necessary to continue operations. The current economic situation undeniable has an effect on the elasticity of demand regarding the service and planning must be done accordingly.
3.3.3 Marketing plan

The company needs to effectively differentiate itself from the existing competition to gain market share. This can be done using advertising in various sources. Internet advertisements are relatively cheap but also less effective compared to radio and television advertising, which command significantly higher prices but also increase product awareness. Initially the best course of action would likely be to stick with printed and radio advertisements. Considering how many people today leave radio on in the background while working has increased its potential reach while still being significantly cheaper than television advertising.

One key factor in the company’s success will be its ability to inform potential customers of its existence and attract them to buy the services it provides. Creating a strong, positive brand image will be one of the challenges the company will face in its lifetime. The message our company tries to convey is that we provide tools to unlock the true potential of our customers. Potential that was never truly realized due to different ways of thinking.

It is of paramount importance to inform customers that the service provided can significantly improve their operations to create demand, as the adoption rate may be low in its current state. Product awareness can be increased through successful advertising and thusly create demand for the service, which is the essence of the company’s marketing strategy.

In times where internet has grown to be a massive source of both information and networking, is important to establish online prevalence in the form of an intuitive website that reflects the company’s vision while concisely providing the key information about the provided service. Positive feedback from clients will be listed on our website in the form of cases which gives new customers more insight into our services and results they generate. This also means the setup of social media accounts for the company’s use which allows effortless and quick communication with customers. Social networking is a powerful tool for two-way communication with customers and competition which can yield significant benefits when properly utilized.
4 FINANCIAL PLANNING

4.1 General assumptions

Due to the fact that the planned business has not been established yet, all the numbers in the following tables will be projections. The projections found in the tables are based on prices in the market today and as such reflect realistic expectations. Taxation percentages on the projections are based on the 2014 information available from the Finnish tax Administration site www.vero.fi.

<table>
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<td>20</td>
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4.1.1 Financing the venture

As the founders’ own funds are limited, we must take a bank loan to establish the business and initiate the operations. A long term loan of 50000€ should be sufficient assuming business starts successfully without major hindrances. Contingencies are difficult to plan for and thusly the finances won’t necessarily reflect how a new start-up would perform in reality.

In most cases a bank loan is necessary to initially establish a new business venture. This naturally means that entrepreneur already takes a generous risk already in the initial stages of his/her business when no certainty of its future is set. As mentioned earlier risk taking and uncertainty are both core aspects of entrepreneurship, and must be prepared for. Assuming a successful establishment for the venture, the entrepreneur will be bound to the bank loan that was taken to setup the business, which will affect cash flow thusly, negatively affecting expansion possibilities.

Once the venture has been setup and its operations are more or less stable the entrepreneurs can start discussing the question of future financing, which is often more difficult.
Considering the necessity of growth for sustaining business in the long run, the entrepreneur must bear in mind the fact that in many cases the start-up’s own cash flow is not enough to finance growth. In most cases this means that the venture must rely on outside sources of financing for expansion.

It can be argued that the most important thing is to attempt to initiate the early operations as soon as possible to secure some cash flow and lessen the need for loan based financing. If and entrepreneur shuns bank loans and wishes to remain independent, one solution for initial financing could be crowdfunding, which has increased its popularity largely over the past few years. One popular website for crowdfunding is https://www.kickstarter.com/, where people can seek funding from likeminded people who wish to support your cause. According to their website, Kickstarter says that since its launch in 2009, 7.5 million people have pledged $1 billion funding 74000 products. (Kickstarter 2014)

There are several methods for financing a new venture. There are also naturally several stages for a startup investment cycle. The first stage can be called the Angels & Family, Friends and Fools (FFF) who take the highest risk of all, as they choose to invest in an idea. The FFF’s are a somewhat of a separate entity as you may ask for a small amount of cash from a friend who may not expect much in return for example. Angels on the other hand are often times wealthy professionals with good connections who is seeking returns on the invested capital. Another source of early investment is the seed funding, which is meant as an early support for the venture until the venture has been setup. (Kiska 2014.)

The next stage comes in after the business has been setup and has existing customers. Investments at this point are referred to as venture capitals providing cash for companies that show promise. (Kiska 2014.)

The final stage is the private equity and public markets –stage where the companies might still be interested in innovating its products or expansion, which is in these late stages often done through competitor acquisition. Kiska states that it is rare for a venture to see the full startup investment cycle. Regardless, he states that even going through the first initial stages can be a rewarding journey. (Kiska 2014.)
4.1.2 Startup expenses

Sources of capital

Owners’ investment (name and percentage of ownership)

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<tr>
<th>Name</th>
<th>Percentage</th>
<th>Amount (€)</th>
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<tr>
<td>Hannu Kouhia (50%)</td>
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<td>Tapio Vuorinen (50%)</td>
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Total € 50000

Bank loans

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Total € 50000

Total amount of capital € 100000

Startup expenses

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<th>Amount (€)</th>
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<td>Administrative expenses</td>
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<td>Inventory</td>
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<td>Contingencies</td>
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<td>Other expenses</td>
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Total startup expenses € 44200

Gap € 55800
### Income statement

#### 2015

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4.2 Break-even analysis

**Break-even analysis**

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<td>Heating &amp; energy</td>
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<tr>
<td>Maintenance</td>
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<td><strong>Total (EUR €)</strong></td>
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<table>
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<td><strong>Total (EUR €)</strong></td>
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<tbody>
<tr>
<td>Profit margin %</td>
<td>36 %</td>
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<tr>
<td>Break-even point (EUR €)</td>
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<tr>
<td>Gross margin</td>
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As can be seen, the results display significant returns with the projected finances. These are further analysed in an upcoming chapter.
5 FUTURE PLANS

5.1.1 Three year plan

Growth is a key feature for the survival of all businesses, but it will be of paramount importance for this business plan. As the market size with only a single industry is limited, expansion is required to ensure the company’s survival.

Assuming the business launches successfully and starts gaining market recognition, some growth can be expected and is even required. Without any growth the business will fail due to debts and inflation. With the financial projections in mind the company would start being profitable toward the end of year one of operations. This means the first year’s income will not allow any investments into the company, as all income will be spent to maintain the company. However projecting a growth of approximately 10% in sales for year two would start allowing some investment into the company for potential expansion prospects. If after year two the growth rate remains at least 10% or has grown closer to 15-20%, the company can start looking into expanding into different fields of consultation.

It has to be noted that economic fluctuations will affect this type of business as well. These are contingencies which are difficult to plan for and must be handled on the fly as they appear. However, the general growing interest in adopting lean methodologies would bode well for the company’s growth.
5.1.2 Potential expansion

Lean and its concepts can be applied to virtually any industry making expansion into other industry fields more accessible. That being said, a certain level of expertise is required to properly analyze customers’ needs and provide a thorough service.

As the market for software engineering is relatively small and limiting your company’s product to only one service is extremely ill-advised, expanding into other fields is essential. My own personal competence allows expansion to personal and corporate finance consultancy, both of which are in the radar for expansion. Later the company will expand into various manufacturing industries, warehousing, logistics, finance and insurance consultancy offering a wider range of services to companies operating in multiple different fields.

Due to the large investment expansions require an additional source of capital is often required. This is either another bank loan or a business angel who chooses to invest in companies that show potential for growth. Korhonen (2014) in a recent radio interview gave a little bit of insight to his process of choosing an appropriate target for investment. Korhonen says that the business angel not only gives monetary resources but also gives access to his/her industry knowledge and networks. He mentions that the majority of the investments that business angels do not return the invested capital. Due to the high risk involved in the angel investing the investor must carefully choose the proper target. Korhonen mentions that the main point of interest business angels are looking for is the potential for growth as it is the only way to receive positive return on investment. Korhonen himself mentions the main characteristic he looks for in a company when investing is the team that runs the start-up. He emphasizes the importance of a good team that can surge growth for the business. Other things he looks for are scalability, how well the business operations scale upon when expanding, quickly growing market interest and how easily the product can be copied. (Korhonen 2014.)
6 CONCLUSIONS

Considering the market and overall economic situation at large, establishing a business under current the circumstances is very risky. The risks do not include lack of experience from entrepreneurship which significantly affects the company’s performance. One major question of this thesis was to evaluate the profitability of the proposed business. The financial projections indicate that with the current price levels the business can indeed be very much profitable, however there is a significant risk associated with this, which is customer interest toward the service. The financial projections are based on the fact that customers are attracted to the business in general, however, the cold fact remains that customers can be extremely difficult to attract to the service. If done successfully profits are accordingly increased which explain the relatively large profit margin and gross margin. While the financial projections show significant returns when sales go as planned, the reality may not reflect this. Demand is difficult to evaluate at this stage especially when this type of service is not abundant in the market.

Growth and financing are likely to be the main issues this company will run into if established. Considering it is a service and can be relatively easily copied, competitors can appear quickly and reduce the potential customers. Not to mention the overall poor scalability of a service typed business. When operations grow and customers increase, more work and staff are required scaling costs higher. These two issues make attracting outside funding more difficult making a bank the most likely option for future business funding.

While this type of service business can be considered high-risk, high-reward, lean as concept itself is attractive alleviating the risks to a certain degree. However, the attractiveness of a product does not get a business far on itself, however. Lean is a concept that requires a lot of investment from the clients. Both time and capital are required when they are looking to take a step into the more optimized processes. While the first initial steps are relatively simple to do and do not require much, they also yield less rewards which may frustrate the client if they were expecting higher returns. This is naturally an issue which can be rectified by communicating with the client, but they may be discouraged to invest in further lean concept adoptions.
Statistically speaking lean can provide high benefits when properly adopted, but little
can be guaranteed unless the customers are fully devoted to the improvement of their
processes. It takes a well-motivated management team to encourage the team as a whole
to stick to the lean principles to see the full potential it has to offer. Conveying this mes-
sage convincingly to the customers will be difficult, but with proper marketing and team
training, it can be done.

All in all, establishing this venture will be very risky when all is taken into considera-
tion which is not uncommon especially for a new entrepreneur. However, it has the po-
tential for moderate success in the lean consultancy field. The increasing market interest
and relatively low competition are attractive factors, but do not diminish the risk of fail-
ure if customers do not demand the product enough. The proposed location of the busi-
ness has plenty of companies that could invest in the lean services; it is simply a matter
of attracting them. With well-established marketing strategies, I believe this can be done
as well.
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https://www.kickstarter.com/

https://www.ytj.fi/palvelut/Perusta-osakeyhtio-verkossa (In Finnish)