

Developing a business plan for bio-energy companies

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Abstract— Business plan is important tool for managing any business. This is due to the fact that it form up a basis for the business as well as discusses how important challenges should be solved. To be successful it needs to take into account several different business factors and finally all these factors need to be presented in written format and in synchrony. Rather often also third parties like financing institutions are interested in of the business plans as they form a solid basis for making funding decisions.

This paper discusses about the business as concept and outlines the importance of a business plan for an entrepreneur. After motivating entrepreneurs for making a business plan, this paper discusses about the content of it and links it into the daily management of a company. Especial emphasis in the discussion is in giving writing instructions for entrepreneurs having an interest for writing a business plan.

As all business plans need to be usable in practice, this paper discusses also about the characteristics of bio-energy business where the proposed plan is tested in practice. Industrial experiences from the bio-energy seminar show that proposed business plan is seen usable in bio-energy companies. They also show that designed writing instructions given step by step are helping in the writing work. As a whole proposed business plan serves bio-energy entrepreneurs and financing institutions as an action plan, road map and sales tool and also informs customers about the bio-energy company's ways of working.

The theoretical discussion in this paper has been written using a constructive research method. Therefore the theoretical part of this paper constructs a new reality by using results which in part have been presented before and have proven to be usable.

The industrial experience part of this paper is a case study. The case study method has been seen usable as it gives rich qualitative understanding to the phenomena examined. As well when presented in chronologically proceeding style gives a logical outlook to the seminar kept in real life.

Keywords—Business plan, planning, bio-energy, industrial experiences.

I. INTRODUCTION

I N nowadays entrepreneurship is recognised – both by scholars and practitioners – as one of the most important engines of economic growth. Its contributions cover different field as: fostering innovation, enhancing productivity, job creation, and effective alternative to wage employment, all of these driving to increasing national and personal incomes. That is why policies to foster entrepreneurship are widely promoted in all countries, and numerous studies are pursued in order to identify the factors influencing entrepreneurship. [5]

In general, business plan guides entrepreneurs step by step in the path of business planning. It discusses about the circumstances where we are running our business and outlines our way to the future where circumstances might differ. Business plan also describes, analyzes and gives a detailed projection about its future development. Potentially it offers benefits to entrepreneurs, financiers and third parties (for example tax authorities) interested in of a company. It outlines the business idea including risks and opportunities and monitors out the remaining placed money.

The cornerstones of the business plan are the financial documents. These documents should include all revenues and expenses that can be obtained, the implementation costs of the project, benefits, the economic viability analysis, investment calculations and other important aspects.

The problem of this paper is to find out a working business plan structure for bio-energy companies. Firstly, this paper discusses about several different topics which can be considered to be independent areas of a business plan. Secondly, this paper summarizes the discussion of business plan content and thirdly introduces industrial experiences of using it in a bio-energy company in practice.

The theoretical part of this paper is constructive in nature. Constructive research constructs new reality by using research results which have in part been presented before and sees that typically the developed new utilities are sooner or later evaluated. In nature it is interested in of trying to answer to the following questions: [5]

- Can we build a certain innovation and how useful it is?
- What kind a certain innovation should be?
- How ought we build a particular innovation?

Typically, constructive research is applied research, but instead of developing “a final product” it sees that it is

possible to accept the prototype or even a plan. In comparison to action research it is missing the idea of cyclic development process (identify problem, plan actions, take action, evaluate and specify learning) and bases on non cyclic development of innovation [5].

The experimental part of this paper is a case study. Typically, a case study is an empirical inquiry that meets the following criteria: [12]

- It investigates a contemporary phenomenon within its real-life context, especially when
- The boundaries between phenomenon and context are not clearly evident.
- In this study, presented case bases on a experiences collected from a real-life company. In addition the experimental part of this study can be considered as case because the inquiry: [12]
- Copes with the technically distinctive situation in which there will be many more variables of interest than data points, and as a result
- Relies on multiple sources of evidence, with data needing to converge in a triangulating fashion, and as another result
- Benefits from the prior development of theoretical propositions to guide data collection and analysis.

II. BUSINESS AS CONCEPT

For understanding challenges related to business plan preparation it is necessary to understand enough about business and its content. Reo [10] has stated that: "business is a much broader concept than, for example, engineering or production. It refers to a holistic, process-driven, cross-functional, and multi-disciplinary view of companies. According to this view, all functional areas of a business such as product planning and management, engineering, customer support, and information and knowledge, human resource, marketing, legal, and financial management need to be addressed in a balanced way."

Product planning needs to be in balance so that we fulfill most of our customers' expectations. Engineering needs to provide solutions for the production of the products as well as marketing needs to provide ways to sell them. We also need to organize customer support functions so that we can support users using the products.

Furthermore, we should also recognize that the customer is interested mostly in our products, not necessarily in other functions or in our processes. If the product works and all customer requirements are fulfilled, the customer will be satisfied.

Since the business offers several points of view to us, it also offers several research challenges. According to Käkölä [6], business research offers: "Challenges in topics including leadership, managerial, organizational, contractual, and product creation and delivery practices as well as in competitive strategies and knowledge management systems of companies." Käkölä [6] sees this kind of broad,

multidisciplinary view as necessary to understand companies holistically. Without such an understanding it is difficult to suggest relatively detailed but generic solutions for a specific strategy, process, product or service [6].

III. BIO-ENERGY AS BUSINESS

Development and adoption of reliable source of renewable bio-energy is major challenge being faced by most of the parts of this planet. Most of research work under the caption of renewable energy encompasses around the limited models of adoption for this form of energy. [3]

From business point of view the business benefit of bio-energy bases heavily on the biomass energetic utilization. Therefore the understanding of bio-energy utility factors is vital. From business planning point of view these factors include, the supply of biomass, structure and localization of involved business, centre of storage and transformation and the related sources of supply and consumptions for important basis for evaluating the benefits of bio-energy in business context.

The recent development of high efficiency biomass heating systems has opened new prospective for the energetic utilization of wood with systems situated near the user in woody areas. Generally, the plant location is optimized through the searching of the best site inside wood high productive areas with a convenient network of forests paths, satisfactory presence of woody business and an easy linking with the grid.

The economical success of building bio-energy power plants is often realized through the environmental impact, social and economic consequences and the influence of public facilities. Therefore, biomass heating offers a number of compelling advantages, both for the system owner and, in the case of district heating systems, for the local community.

Generally, bio-energy can supplant expensive conventional energy sources such as fossil fuels and electricity with local biomass resources, which is often available at little or no cost as waste or low-value by-products from various industries (e.g. forestry and agriculture) [1]. Bio-energy can also cut the overall levels of pollution and greenhouse gases and protect consumers from fossil fuel price increases.

Regionally bio-energy production creates several local jobs in the collection, preparation, and delivery of the feedstock. It enables several other businesses possibilities to grow and shortens transportation distances.

Bio-energy business has also several challenges. Nowadays biomass heating systems tend to have higher initial costs than conventional fossil fuel burning systems. If their prices are not getting lower it can perhaps slow down the growth of bio-energy consumption. It should also be notified that the quality of biomass feedstock is highly variable in comparison with the relatively standardized commercially available fossil fuels.[2] Bio-energy production also claims often more physical space for delivery, storage, and handling of biomaterial. Naturally when bio-energy production seems to offer more logistical challenges it requires more operator involvement and

diligence, which cost more money

Economically, biomass-heating systems seem to offer best business possibilities in areas where conventional energy costs are high and biomass feedstock costs are low. In practice this means areas where normally for example electricity or some other costly form of energy are used for warming real estates and water and biomass residues are at the same time available onsite or nearby at zero or even at no cost basis. [2]

The benefits of bio-energy can be increased if several bio-energy systems are linked to each other regionally. Technologically there are no obstacles for combining biomass heating, wind and solar power and water power into same energy network. Such communities which have multiple energy providers in a same network are not suffering so much of volatile energy prices and climate changes.

However, the final benefit of bio-energy business is always measured in the bio-energy markets where customers, retailers and manufacturers are. Therefore it is important to understand how bio-energy business and markets are working and how different players seem to benefit from them.

From the customer point of view customer gets value when the product needed costs little and performs well [7, 8, 9, 11]:

$$\text{Customer value} = \frac{\text{performance}}{\text{price}}$$

This formula is based on idea that each product component or function has its own specific cost, which increases product price. In practice, the cost of manufacturing these functions varies between customers, as do individual customers' needs for them. Therefore, each product function should satisfy a customer need as described in the following formula [7, 8, 9, 11]:

$$\text{Value} = \text{Value} = [(n \cdot a/c) 1 + (n \cdot a/c) 2 + (n \cdot a/c) ?]$$

where:

n = the need for an object or service

a = the ability of an object or service to satisfy this need

c = the cost of the object.

In this formula, all the functions, which should fulfill customer needs, are presented in numbers and the final function as a question mark.

The value of the bio-energy product to a retailer may differ significantly from the value to a customer. This is because, for one thing, the retailer is primarily interested in a financial return on his investments [7, 8, 9, 11]. Retailers are interested in quick profits, and products that they can sell quickly. Furthermore, retailers want to achieve maximum income with minimum investment. Therefore the value formula for a retailer differs from the value formula for a customer. A retailer's value formula shows that instead of calculating a cost-benefit ratio, retailers estimate the sales revenues they would expect to receive from selling their products. Retail

product value is calculated using the formula [7, 8, 9, 11]:

$$\text{Retail value} = \text{unit sales} (\text{unit price} - \text{unit cost})$$

The manufacturer of the bio-energy product for a retailer or a customer also uses his own formula for value calculation. This is because his interest is slightly different than the others' interests. Compared to a retailer he has higher capital costs, related to the manufacturing plant and tools. This also forces manufacturers to keep manufacturing going on most of the time. Because the manufacturer is also interested in the return he will get on his money, his formula for determining manufacturing value is the following [7, 8, 9, 11]:

$$\text{Manufacturing value} = \frac{[\text{Customer and retailer benefits (1 to n)}] + \text{profit}}{\text{costs}}$$

In addition to the business value consideration bio-energy production should be considered financially as well. Practically this means that in a long run all investments done to it should pay back themselves and entrepreneurs or communities should even get business benefits and profits of their investments. Therefore the cost of invested money can form a challenge for bio-energy business. This is due to the reason that to grow up bio-energy business may need public financial support in the beginning as private sector funding might not be available. However, even this would be the situation it is necessary that bio-energy entrepreneurs are building their business plans properly taking into account different kinds of business measures like value, profitability and financing. With a properly built business plan entrepreneur can also communicate his interests to several other players in the bio-energy markets.

IV. BUSINESS PLAN FOR BIO-ENERGY

There are several definitions and defined contents for a business plan. Most of them seem to see that business plan has three primary functions:

- 1) To serve as an Action Plan
- 2) To serve as a Road Map
- 3) To serve as a Sales Tool

A. Action Plan.

A business plan can help to move entrepreneur to action. Entrepreneur may have been thinking for years about starting a business or engaging in some venture, but the process may seem too daunting, too large and too complicated. A business plan will help him to pull apart the pieces of starting a business and examine each piece by itself. So instead of one large problem, he has a sequence of smaller problems. And by solving the small problems, the large problem is automatically solved. So writing a business plan can help to move him to action by breaking down a seemingly insurmountable task (starting a business) into many smaller, less intimidating tasks.

B. Road Map.

Once entrepreneur has started his business, a business plan can be an invaluable tool to help keep him on track and

moving in the direction he wants to go. In the daily business, it is very easy to lose sight of his objectives and goals -- a business plan can help to keep him focused. A business plan can also serve to help others to understand his vision, including suppliers, customers, employees, friends, and family.

C. Sales Tool.

Perhaps most importantly, a business plan can serve as a sales tool. Entrepreneur will probably need outside financing to start his business, and a business plan is the tool you need to convince investors to come on board. Entrepreneur may also want and need concessions from suppliers or customers -- a business plan can help him get them. Finally he may need to convince family members, or even yourself, that his ideas will bear fruit. A well-written business plan can serve to sell people close to you on the benefits of proceeding with your concept.

From business plan point of view bio-energy business represents a typical industrial activity. Bio-energy companies market and offer products and services to their customers. For doing so they need to have complete understanding of marketplace, competitor behavior, and they also need to organize their management, financing and operations in a way that their business is in a solid basis.

For the purposes of this study it has been seen appropriate to use following structure as a basis for developing a business plan for bio-energy companies. This is because it offers a wide structure for discussion purposes and seems to offer several aspects which should be solved when forming up a bio-energy business.

The Executive Summary of a Business Plan is a short outline to entire plan, and often is the last section to be written. Its objective is to capture the reader's interest, so that they want to read the entire plan. It is not a summary of the plan; rather it should be considered a chance to "sell" the reader on the business opportunity. A first-time reader should be able to read the Summary by itself, and know what plan is all about. The Summary should stand-alone and should not refer to other parts of business plan. Executive summary should contain discussions of following topics:

- Opportunity,
- Solution,
- Competitive Advantage,
- Process,
- Positioning,
- Financials and Management.

The Company Overview part of a business plan is a brief description of the company founded or wanted to found. It should explain:

- How company will be organized?
- Will it be a sole proprietorship, partnership, or corporation?
- What are entrepreneurs' ambitions for the company?
- Will it always be a small company, or is the purpose to grow significantly?

By reading this section, the reader should have a good idea of where entrepreneur is and is going with the company. Therefore needed discussion topics in overview include:

- Mission Statement
- History and Current Status

- Market and Products
- Objectives

The Product and Services section of a business plan is a detailed description of the products and/or services entrepreneur will be selling. It should not assume that the reader is familiar with product/service beforehand. Therefore entrepreneur should start to sell his idea here by generating some excitement about his product/service. To be able to achieve its purpose Product or Service Description should contain following topics:

- Description
- Market Comparison
- Proprietary Rights
- Stage of Development

The Industry and Marketplace Analysis section describes and outlines the industry and the marketplace in which entrepreneur is competing. The focus in this section is on the industry and marketplace as it currently exists -- entrepreneur may not even mention his business here, unless it already is a part of the industry. When finished with this section, entrepreneur and his readers should understand the dynamics, problems, and opportunities driving the industry and marketplace.

Industry and Marketplace Analysis section should contain for example following sub analyses:

- Industry Analysis
- Marketplace Analysis
- Customer Analysis
- Competitor Analysis

The Marketing and Sales section of business plan will make or break the prospects for entrepreneurs' venture. A great idea is meaningless if entrepreneur cannot find customers. Carefully drafted and logical financial projections are irrelevant if nobody buys the product. In this Marketing Strategy section entrepreneur must convince first himself, and then the reader, that there is indeed an eager market for the product. The Marketing Strategy section is where entrepreneur will show how he is going to fit into the market structure he just finished describing. Successful Marketing Plan contains solutions for following topics:

- Target Market Strategy
- Product/Service Strategy
- Pricing Strategy
- Distribution Strategy
- Advertising and Promotion Strategy
- Sales Strategy
- Marketing and Sales Forecasts

The Operations section outlines how entrepreneur will run his business and deliver value to his customers. Operations is defined as the processes used to deliver products and services to the marketplace and can include manufacturing, transportation, logistics, travel, printing, consulting, after-sales service, and so on. Operation form a significant portion of business costs (even 85%) as personnel will be working in operations. Entrepreneur should be sure that he carefully links the design of his operations to his marketing plan. When writing the operations part of the business plan entrepreneur should be careful on solving following topics so that he can

deliver products to the market in accordance with his marketing plan:

- Operations Strategy
- Scope of Operations
- Ongoing Operations
- Operations Costs

In the Development Plan entrepreneur will outline how he intends to ramp-up his business. The Development Plan is a road map of how entrepreneur is going to get from where he is now to where he wants to be in the future. Typically, starting businesses explain here: what are all of the steps that they need to accomplish to get the business up and running. Older businesses explain what do they need to do to make it grow. Development Plan often contains following parts;

- Development Strategy
- Development Timeline
- Development Expenses

Financing institutions often see that there are three important attributes in any business: management, management, and management. If management is not seen to good enough to solve practical business problems with enough experience any business plan is worthless. Therefore in business plan the description of management and their skills is extremely important. In general management plan should contain information on:

- Company Organization
- Management Team
- Administrative Expenses

The Financial Plan should be the umbrella of the business plan. In other areas of business plan entrepreneur should have outlined a great business concept, demonstrated a real need in the marketplace, shown how he will execute his ideas, proven that his team is just right to manage the venture, and in financial plan he will show how much money everyone is going to make. If described business concept is weak, or there is not a market, or if execution is poor, or if management team is incompetent, then financial plans are doomed to failure. So generally if entrepreneur can't show that his great concept is going to make money, his readers will quickly lose their interest for business. Financial Plan should contain business solutions for following topics

- Financial Statements, Financial Comparables, Financial Summary and Financial Assumptions
- Funding Requirements
- Sources and Uses of Funds
- Business Risks

The Funding Request is where entrepreneur will make his pitch for money. If he has decided to seek equity capital, then he needs to describe the type of security being offered (common, preferred, warrants, etc) to the investor and what share of his company they will receive for a specified investment. If entrepreneur is seeking a loan, then he needs to indicate to potential lender how the loan will be repaid and what is the interest rate. In either case, it is important that entrepreneur clearly spells out the key terms of the proposal and sells the advantages to the investor/lender, and makes it clear how they can get a satisfactory return. Rather often Funding Request includes information on following areas:

- Investment Requirements
- Valuation of Business
- Offer
- Exit Strategy

V. BUSINESS PROCESS WRITING PLAN

Business plan contains several different areas which support each other. In practice it is extremely important that these areas are well written and synchronized to each other. The following steps formulate a one possible writing plan for writing a successful business plan:

1. Write Short Summary
2. Write Industry and Marketplace Analysis
3. Write Marketing Plan
4. Write Operations Plan
5. Write Development Plan
6. Write Management Plan
7. Create Strategy
8. Estimate Income and Costs
9. Prepare Financial Statements
10. Define Funding Needs
11. Finalize Plan
12. Present Plan

The purpose of the Short Summary is to serve as a reference and motivational document through the writing process. From content point of view the Short Summary forms all cornerstones of the most important issues which are discussed and justified later in the writing process.

After writing a summary of the business plan it is useful to concentrate on writing the Industry and Marketplace analysis. Understanding of the markets, industry and competitors form a good and realistic basis for building any business plan. It outlines an idea of how competitors are acting in markets. It shows what kind of products they have and what kind of profitability they have achieved. Potentially it shows also the direction where markets are moving and which areas of markets are less competed. After forming up a realistic view of industry and markets entrepreneur has a better possibility to analyze how his designed products can succeed in the same markets. The writing style for writing a summary should be intensified and accurate. Short sentences should be favored instead of long ones for improving understanding.

The purpose of the Industry and Marketplace Analysis is to give a realistic view to the entrepreneur about the markets where he is going. After this view has been clarified it is natural to think about the own mission statement. It should express the vision of the company, ambitions, and goals to be achieved. It should work as a direction and aim giving document, which motivates entrepreneur, potential investors and other stakeholders for developing business further. Especially the vision statement should create a big picture of the customers and entrepreneur in the markets fulfilling each other's needs. It should justify what customers need and as well it should justify how the entrepreneur is fulfilling these needs. When the entrepreneur has justified the mission of his company in the markets he needs to think what kind of Marketing Plan is needed for getting his message through in

the markets. As stated in earlier chapter a proper Marketing Plan includes information on:

- Target Market Strategy
- Product/Service Strategy
- Pricing Strategy
- Distribution Strategy
- Advertising and Promotion Strategy
- Sales Strategy
- Marketing and Sales Forecasts

From writing point of view the Target Market Strategy should justify why defined markets are realistic for the company. The Product/service strategy should indicate why designed products are needed in the markets and what kind of updates they will have in the future. Pricing should be realistic and it should also base on existing cost accounting information. The Distribution strategy should be written in a logical manner so that it gives a realistic view to the distribution channel and its functional strengths. The Advertising, Promotion and Sales Strategies should be written in a customer satisfying manner concentrating on customer needs and fulfilling them. The Marketing and Sales Forecasts should base on numeric data collected using the best possible sources of information.

The Operations Plan outlines understanding of working processes to the employees. It explains and justifies how the entrepreneur is running his business and how he delivers value to his customers. Therefore the written text should be simple and easy to understand so that all possible misunderstandings could be avoided and understanding of work processes would be equal among the employees. Quite often the Operational Plan is linked to the operational process descriptions which state how entrepreneur is delivering his products and services to the marketplace.

The purpose of the Development Plan is to tell how the entrepreneur is ramping up his business step by step. Therefore the nature of writing it is based on a chronological presentation style using timelines and figures. The Management Plan should contain concrete and convincing text which defines the roles and justifies why different persons with their experiences fit to these roles in the company.

After writing the Industrial and Marketplace Analysis, Marketing Plan, Operations Plan, Development Plan and Management Plan the entrepreneur should write as a summarizing text the entire company Strategy. It should be built based on internal strengths and weaknesses found on the previously written documents from the company and it should also notify the potential opportunities and threats found in external factors.

For funding purposes the entrepreneur needs to collect and estimate Income and Cost information as well as present the Financial Statements. Naturally, this kind of information is mathematical in nature and presents profitability from different point of views (for example company and product point of views). Presented calculations should define funding needs of the business proposal and divide them for different funding institutions in the form of the Funding Request.

As last writing task the entrepreneur should check all written parts of the Business Plan. Written parts should be in

synchrony with each other and they should provide support to each other. Naturally, presentation of the Business Plan should be energetic and entrepreneur should have the ability to convince his listeners.

VI. INDUSTRIAL EXPERIENCES ON THE PROPOSED BUSINESS PLAN

The usefulness of the developed business plan was discussed in 2010 in an industrial experiences on bio-energy - seminar. All discussion participants were selected carefully for the purpose that they would represent normal stakeholders of the bio-energy business. Seven persons represented entrepreneurs either already having or just ramping up the bio-energy business. Four persons represented financing sector including banks and venture capital institutions and five persons were already using bio-energy products as bio-energy customers.

In the beginning of the seminar the bio-energy business plan was given to the participants. It was explained in every detail and participants were given time to form up their own opinion about it. After this all participants were given time to write down their opinions and discussion was held based on written comments.

In this paper the presented case study bases mostly on the comments written by seminar participants. As researcher also collected findings during the discussion some comments have been collected by researcher.

Firstly discussed topic in the seminar included the executive summary. All persons saw that it is a useful part in any business plan. It was seen extremely important that entrepreneurs are able to shortly summarize all important aspects of their business. Entrepreneurs told that this part of the business plan helps to see the big picture of their business. Representatives from the financial institutions told that business plan helps them to memorize the most important aspects of discussed business as they work with several different entrepreneurs daily. For the customers who do not normally see any business plans, the summary gave a good starting point for understanding the business discussed.

Secondly discussed part of the business plan was the company overview. All persons saw that a reasonable amount of history with present information gave a good understanding of the company. Especially, entrepreneurs and financing institutions saw that the mission of the company is extremely important as well. They justified their statements by saying that their capital is tied for longer times in the company and therefore the mission of the company should be understandable for them. Customers did not see the mission of the company as very important. They highlighted that they are not tying themselves for such a long time to the company that the company's mission would be meaningful for them.

Thirdly discussed topic seemed to be very interesting for all participants. Entrepreneurs saw that the product and service descriptions define for both entrepreneurs and customers what are the products what company is offering to the markets. Therefore these descriptions are combining the interests of entrepreneurs and customers. The entrepreneurs told that they saw it important that this part of the business plan would also

include a comparison of products competing in the same markets. The financing institutions understood the interests what entrepreneurs and customer had for the product and service descriptions. They told that for them these descriptions are also important. In their opinion if the products and services are not combining entrepreneurs and customers it is a big problem for financing institutions as well. This is because it raises the risks of their investments to the company significantly.

Fourthly discussed topic included the industry and marketplace analysis. Both the entrepreneurs and financing institutions saw this part as very important. They both highlighted that any entrepreneur needs to understand enough about the industry and marketplace to be able to run a profitable business. The customers did not see the industry and marketplace analysis very interesting.

Fifthly discussed area of business plan was the marketing and sales part. All three groups participating to the discussion saw this part as very interesting and important. Entrepreneurs saw that for them it is very important to find customers and customers saw that marketing and sales representatives of any company are the ones with whom they are discussing the most. Therefore both the entrepreneurs and customers saw that this part of the business plan combines them together. Financing institutions added that without successful marketing and sales activities customers can not know what kind of products there are and how they could help customer in their everyday life. As well financing institutions added that the basis of product pricing is usually defined in the marketing plan (pricing) which is important for both entrepreneurs and customers.

Sixthly discussed topic included the operations of the business plan. Operations seemed to be important for all three participating groups. This was because the operations plan was seen to provide continuity for the marketing plan. It provided a solution how the promised products (marketing plan) are delivered to the customer.

Seventhly discussed area of the business plan was interesting for the entrepreneurs and financing institutions. They saw that the development plan provided for them a path and direction from ramping up the business into the future where company is running in the markets. As they had invested a lot of money for the business it would be natural that they both should share the idea of how the company is either growing in the markets or keeping its market position.

Eighthly discussed topic of the business plan was the management. The financing institutions saw this part of business plan as very important. This was because in their opinion management was the one who was taking care of the invested money in the company. All entrepreneurs understood this natural interest what the financing institutions were having for their skills. The discussion of this topic was lively and contained several aspects from high motivation into technical and business skills as well as human management skills. For customers this topic was not very important. They only highlighted that they would like to purchase products from companies where customers and their interests are very well taking care of which was one the management tasks.

Ninthly and tenthly discussed topics included the financial plan and funding request. Based on the earlier discussions it was natural to understand that they both were interesting for entrepreneurs and financing institutions because they showed how much money they both are making, when it will be realizing and what kind of ownership structure the company will be having.

VII. INDUSTRIAL EXPERIENCES ON THE BUSINESS PLAN WRITING

The usefulness of the writing instructions was discussed in an industrial experiences on bio-energy –seminar as well. All discussion participants were the same in this discussion including seven entrepreneurs, four persons from the financing sector and five bio-energy customers.

After participants had formed an idea of business plan structure and they had given comments about it, they were given writing instructions. The purpose of writing instructions as a synchronizing guideline was explained and participants were given time to ask questions about them. After this all participants were given time to write down their opinions and discussion was held based on written comments.

In this paper the presented case study bases mostly on the comments written by seminar participants. As researcher also collected findings during the discussion some comments have been collected by researcher.

Generally all participants saw that writing a business plan is a multi-dimensional work. Writer needs to have ability to develop many different kinds of activities at the same time and he needs to have a clear picture of the direction where he is going. Therefore the idea of writing first the Short Summary which includes the most important ideas of the business plan was seen very important.

Discussion participants also saw that it is natural to continue business plan writing by making the Industry and Marketplace Analysis. This is because it reveals those possibilities which are available for the entrepreneur in the markets. If these possibilities does not seen to be realistic or they are not tempting enough it is natural not to continue writing process. Otherwise if it seems that markets can offer good enough and interesting possibilities for the entrepreneur it is easier to continue forward by having understanding of the markets.

Seminar participants saw natural that after the Industry and Marketplace Analysis entrepreneur is making the Marketing Plan. They saw that Marketing Plan gives in this phase a more detailed understanding of the products, pricing and selling which combined with the Industry and Marketplace Analysis form a natural entity to be evaluated. Especially customers saw this discussion interesting as it offered an analogy to the way how companies are planning new products for them.

Participants shared the idea that after what and to whom had been written it is natural to turn inside the company to start to think about how this is done. Therefore the Operational Plan was seen to be in place when it was proposed to be made next. Especially entrepreneurs saw that it is important to have clear working processes for delivering goods to the markets. They highlighted that as most of the employees are working in the operational tasks the efficiency of running them forms a

continuous competitive advantage if run properly. Financing institutions saw this natural but highlighted that for them the Industry and Marketplace Analysis and the Financial Statements are perhaps the most important areas of business plan. However, both participants groups shared the idea of writing order and supported the idea that it is difficult to make cost and income analysis or financial statements if there is not enough information on how operations are running in the company.

After discussing about the Operational Plan, participants discussed about the Development Plan. They saw that it is a natural continuity for Operational Plan as it forms up a timeline on how all planned Operations are ramped up. As there are not always all resources available in the beginning of the entrepreneurship the Development Plan offers a visibility on how different kinds of operation are run in the company in the different phases of ramping up process. Entrepreneurs saw that this kind of planning is extremely important for them and it guarantees a fluent continuity to the future for the company. Financing institutions highlighted that for them Development Plan is also important to be written in this phase because it forms up a structure to be financed as jumping to the new phase needs often also new financing.

Income and Cost discussions as well as discussions of the Financial Statements were most interesting to the entrepreneurs and financing institutions. Entrepreneurs saw that cost and income calculations either justify or do not justify the profitability of their operations. They also saw that without proper cost calculations they can not price their products realistically for the markets. Financing institutions saw that cost and income calculations form to them a justification for the Financial Statements which are used as basic information for making funding decisions.

Regarding to the Funding Request entrepreneurs and financing institutions shared the opinion that they shared the same markets in this topic. Entrepreneurs were acting as clients for asking funding and financing institutions were acting as suppliers for giving funding. All participants saw that Cost, Income, Financial Statements and Funding Request needed to be prepared as last topic of writing process. They saw that the proposed writing order guarantees the best possible information for making decisions of the profitability of the proposed business.

VIII. CONCLUSION

The problem of this paper was to find out a working business plan model for the bio-energy companies. To do so, firstly, this paper discussed about the nature of business and bio-energy business. This was done because bio-energy business is rather new business area and all aspects of it are not necessarily known. In addition a business plan development requires always a reasonable amount of understanding of the business in question. Secondly, using the results of the theoretical discussion this paper formulated a bio-energy business plan model. As all business plans are mentioned to be used in industry, thirdly this paper discussed about the developed business plan model in an industrial context.

The theoretical discussion and the creation of the business plan were constructive in nature. Therefore, in practice, the new business plan structure was constructed by using research results which had in part been presented before. To highlight the importance of the industrial discussion, this paper presented the results of industrial discussion as a chronologically proceeding practical case study.

The results of creating a business plan for bio-energy companies were encouraging. The developed and discussed business plan structure seemed to combine the communication needs of the most important bio-energy stakeholders. It provided a useful help for entrepreneurs for planning their business and offered enough information for the financing institutions for making their funding decisions. The industrial discussion showed that the proposed business plan serves as an action plan, road map and sales tool for the bio-energy companies.

The discussion of the business plan writing process helped participants to evaluate how the complex multi-dimensional business plan can be created. It seemed that all participants valued the idea of walking through the business plan writing step by step. Especially entrepreneurs saw this as most interesting because they felt that it is their writing process for which they do not often get any help but it will however be criticized later.

The most significant weaknesses of this study are related to the small amount of industrial experiences. Therefore the usefulness of the proposed business plan should always be discussed with relevant stakeholders whenever taking it into use in any industrial situation..

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