



THE BUSINESS PLAN

Case: Organic Farm in Ho Chi Minh City, Vietnam

LAHTI UNIVERSITY OF APPLIED SCIENCES Degree programme in International Business Thesis Autumn 2013 Tri Nguyen Minh Truong Lahti University of Applied Sciences
Degree Programme in International Business

NGUYEN, TRI & TRUONG, MINH: The Business Plan

Case: Organic Farm in Ho Chi Minh City, Vietnam

Bachelor's Thesis in International Business, 91 pages, 0 pages of appendices

Autumn 2013

ABSTRACT

Background. Initially, food is a supply of nutrients for the body's development and it ensures human health. Food can also be a source of disease if it's not hygienic. Vegetables are one of the most important nutrient supplies. However, nowadays, farmers usually use wrong dosage of pesticides even prohibited kinds as well as growth stimulants. The pressing of food safety issue in Vietnam today, along with the excitement of a new cultivation technology have led a business idea of organic Vegetables into authors' mind.

Aims. This thesis studies the process of doing business as an entrepreneur and the current situation of Vietnam, especially Ho Chi Minh City in order to give a business plan that is possible to implement in reality.

Methods. The qualitative research method with deductive approach was used in this thesis study. The data were gathered mainly from the internet, reports and articles on the government's websites.

Results. There is an existing demand of better quality vegetables in Ho Chi Minh City's markets. Therefore, this business can bring profits not only to the owner but also the benefits the society.

Conclusion. The business idea is unique but the business plan is still an initial plan. The authors suggest that more studies should be done in the marketing plan, the financial plan, the human resource plan, and the distribution plan to create a complete business plan. Then, the business idea can lead to a great success in doing business.

Keywords: business idea, business planning, organic, and Aquaponics.

CONTENTS

1	INTRO	DUCTION	1
	1.1	Background of the thesis	1
	1.2	Thesis objective and research questions	2
	1.3	Research methods and data collection	3
	1.4	Scope and limitations	5
	1.5	Thesis structure	6
2	BUSINESS IDEA AND BUSINESS PLANNING		
	2.1	Business idea and the defining process	7
	2.1.1	Business idea	7
	2.1.2	The defining process	8
	2.2	Business planning and the important role	11
	2.2.1	Business planning	11
	2.2.2	The important role of busines plan	12
3	THE ESTABLISHMENT OF THE BUSINESS PROCESS		
	3.1	Good business idea	15
	3.2	The initial plan	22
	3.2.1	Business vision and mission	22
	3.2.2	The operational environment analysis	23
	3.2.3	The marketing plan	27
	3.2.4	The financial considerations	30
	3.2.5	The risk assessment	33
	3.3	Choosing the form of business	34
4	VIETN.	AM AS AN ATTRACTIVE MARKET	37
	4.1	Evaluation of business environment in Vietnam	37
	4.2	The overview of Vietnam's food industry	38
	4.3	Vegetable market in Vietnam	40
	4.3.1	General data	40
	4.3.2	Safe vegetables compared with organic vegetables	42
	4.4	The current situation in Ho Chi Minh City	45
5	TECHNOLOGIES AND THE AQUAPONICS MODEL		
	5.1	Modern technologies in producing organic vegetables	46
	5.2	Aquaponics model	50

	5.2.1	Key words	50
	5.2.2	Aquaponics basic model	51
6	CASE: C	ORGANIC FARM IN HO CHI MINH CITY	57
	6.1	Business idea	57
	6.2	Company's description	60
	6.3	Market situation	61
	6.3.1	Market demand	61
	6.3.2	Market segmentation and target customers	62
	6.3.3	Competitive edges	64
	6.3.4	Competitors	65
	6.4	Marketing plan	67
	6.5	Financial consideration	73
	6.6	Risks assessment	76
7	FINDIN	GS AND CONCLUSIONS	78
	7.1	Findings	78
	7.2	Final decisions	80
	7.3	Proposal for future research	81
8	SUMMA	ARY	82
RE	FERENC	CES	84

LIST OF FIGURES

FIGURE 1. Research methodology	3
FIGURE 2. Deductive model	4
FIGURE 3. Thesis structure	6
FIGURE 4. The business model Hoffren (modified from Hoffren 2002) \dots	9
FIGURE 5. The business model Canvas	10
FIGURE 6. Stages in establishing a business in Finland	15
FIGURE 7. Types of partnerships	20
FIGURE 8. The simple business model Canvas	22
FIGURE 9. The types of competitor	27
FIGURE 10. The influences on marketing strategy	28
FIGURE 11. The four Ps: the marketing mix	29
FIGURE 12. The balance sheet equation	32
FIGURE 13. The GDP, Credit and Inflation growth in Vietnam	37
FIGURE 14. The SWOT analyst of Vietnam Food Industry	40
FIGURE 15. The layers of a compost heap	48
FIGURE 16. The group flower for aquaponic system	52
FIGURE 17. The fish group for organic system	53
FIGURE 18. The Aquaponics in Action	54
FIGURE 19. The nitrogen cycle	55
FIGURE 20. The basic Aquaponic system	56
FIGURE 21. The business idea	57
FIGURE 22. The distribution channel	70

LIST OF TABLES

TABLE 1. Types and phases of Channels	17
TABLE 2. The Income statement	32
TABLE 3. Food consumption index – data and forecast of BMI	39
TABLE 4. Fruit and Vegetables export turnover of Vietnam during perio	d 2007-
2011	41
TABLE 5. Basic information of the business	60
TABLE 6. Basic information of the founders	61
TABLE 7. Market segmentation	63
TABLE 8. Market price of Vegetables in Ho Chi Minh City	69
TABLE 9. The communication types of marketing	71
TABLE 10. The start-up expense	73
TABLE 11. Operation cost	74
TABLE 12. The capital structure	75
TABLE 13. Profit and loss account	75
TABLE 14. The research questions and findings	78

1 INTRODUCTION

1.1 Background of the thesis

Vegetables are essential in the human daily rations. They are not only used to provide nutrients, minerals and vitamins for the human body but also the principal components. They cannot be replaced by other substances because vegetables provide fibers, against constipation disease and appendicitis (Thuy 2005). Moreover, vitamins and fibers in vegetables can neutralize toxins that arise in the process of food digestion and stimulate digestion (Niehoff 2012). Thus, vegetables play an irreplaceable role in daily food consumption of human.

Vietnam is a tropical country, with favorable weather conditions to grow vegetables in all seasons. Consequently, the types of vegetables that are grown are also very diverse. However, the farmers focus too much on productivity, intensive cultivation, and increasing crops. Moreover, famers fertilize plants indiscriminately, and use insecticides, pesticides, and growth stimulants uncontrollably. That does not guarantee food safety. This leads to thousands of food poisoning cases in every year. The reason comes from the use of vegetable products that contain too much pesticide and growth stimulants. This causes many diseases such as cancer, toxicity to the nervous system, kidney dysfunction, and others. Thus, food safety is a key issue and it makes the demand for safe vegetables grow rapidly, mainly in the major cities, especially in Ho Chi Minh City (Van 2009).

Through preliminary researches, the authors of this thesis noticed that currently in Vietnam, there are two concepts of vegetables: clean vegetables and safe vegetables. Ninety percentages (90%) of consumers cannot distinguish between safe and unsafe vegetables. "Visibly clean" vegetables, without worms or soil, are considered to be clean vegetables. However, it doesn't mean they are truly safe vegetables (Anh 2012). Vegetables are considered as safe when the nitrate and heavy metals, pesticide, and microbial contamination levels are below the standard level which is issued by the Ministry of Agriculture and Rural Development. Even so, it is very difficult for consumers to identify which

vegetables are grown under the prescribed standards.

Nowadays, people get used to the term "Organic Food". As briefly explained, organic food is produced by methods that do not require the use of any chemical fertilizers, pesticides and growth stimulants. Organic food includes organic vegetables that apply only organic farming methods. Thus, organic vegetables are definitely safe vegetables.

In fact, organic food in general and organic vegetables in particular does not have their place in the market. Because of the required advance technology, their prices are twice as much and even consumers can not determine the difference between organic and normal products (Baomoi 2012). On the order hand, income per capita in Vietnam is increasing and there is a rise in the number of households who are willing to pay a little extra for safe vegetables. Hence, the issue is to create the trust of consumers in the brand of vegetables which include both clean and safe elements.

Doing more researches, the authors found that, in the developed countries such as the United State, Japan, Canada and Australia, there is one type of cultivation which combines Aquaculture and Hydroponics. It is called the Aquaponics system. The Aquaponics system brings real benefits and the uniqueness such as entirely fresh vegetables with the most natural flavors. This system produces completely organic food, high growth rate and yields without soil planting requirement, and environmental protections (Lenard 2013). This model has a lot of potential and it is also the most ideal model in the future, for Vietnam and for the world. The idea of making a business plan was inspired by this.

1.2 Thesis objective and research questions

The objective of this thesis is to formulate the business idea into an initial business plan. Furthermore, the authors also want to analize the feasibility, the potential profitability, and also the success of the business plan in order to implement it in the reality.

In order to achieve these goals, the following detailed research questions were identified to support the thesis's objective:

- 1. What is the current situation of organic food in Vietnam, especially in Ho Chi Minh City?
- 2. Is there any demand for organic food in Vietnam market, especially in Ho Chi Minh City?
- 3. Who are the target customers of high quality organic food in Ho Chi Minh market?
- 4. How will the marketing be performed to reach the target customers?
- 5. How much money is needed to start the business and where can the business get that financial funding?
- 6. How much profit can this business idea gain?

1.3 Research methods and data collection

The following figure describes an overview of this study's methodology:

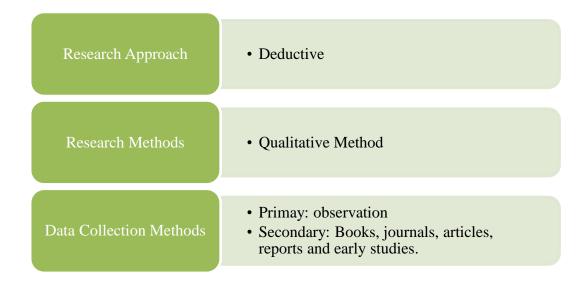


FIGURE 1. Research Methodology.

Research Approach:

In a research process, the most important thing is to decide which research approach would be best. In addition, understanding these approaches can help increase the efficiency of the research study. There are two main research

approaches. These are deductive and inductive, which are completely different from each other. (Tashakkri, Teddlie 2002.)

The inductive approach is highly associated with the interpretivism philosophy. Simply the inductive approach works over a specific idea to generalize the situation according to the research topic. Observation, patterns, tentative hypotheses and theory are important steps of the inductive approach. In contrast, the deductive approach is linked with the positivism philosophy and it moves from a general idea to reach at the specific situation. (Burney 2008.)

However, it is also possible to utilize the combination of both inductive and deductive approaches that includes both building and testing of the theories (Saunders et.al 2009.)

According to the nature of research problems and the context of this study, deductive approach is chosen as the most suitable approach. Figure 2 demonstrates the deductive approach.

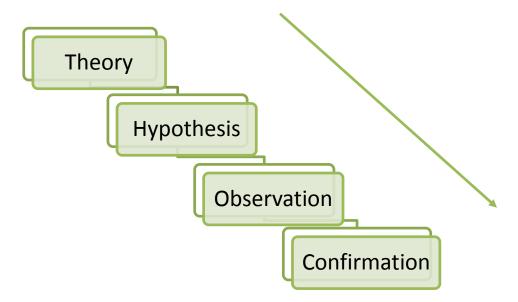


Figure 2: Deductive Model.

Research Method:

After identifying the deductive approach as the research approach, research methodology needs to be determined as well. There are two basic broad categories of research methods which are qualitative and quantitative.

Quantitative method is based on numerical measurement which produced the results. On the other hand, qualitative research is characterized by the collection and analysis of textual data (surveys, interviews, focus groups, conversational analysis, observation, ethnographies), and its emphasis is on the context within which the study occurs. (Olds et.al 2005.)

In this study, the qualitative method is the appropriate method which enables authors to answer the research questions. By using qualitative method, authors can prepare a careful planning of a research design that encompasses all aspects of the study, from research questions to data collection and analysis.

Data Collection Methods

When conducting a study, it is recommended to use various sources in order to gain a fuller understanding of the context and a more solid foundation. With these, the authors can make the right choices. Also, the use of multiple sources enhances the reliability and validity of evidence as well as strengthens the author's arguments (Yin 2003). Therefore, both primary and secondary sources are needed for data collection. The primary source in this study is gathered from the internet. The secondary sources include journals, articles, and some previous studies which are used mainly in theoretical part.

1.4 Scope and limitations

As this study's objective is to formulate the business idea into an initial business plan by using the Canvas's business plan pattern. The authors try to clarify all the important factors such as: the market, customers, competitors, products, risks, competences, technologies, the marketing plan and the financial plan in the initial business plan. However, the market is only focused on Ho Chi Minh City which is

the biggest city in Vietnam and it is also the most potential market for the food industry. Other markets will not be analyzed, concentrated or compared in this thesis.

The marketing plan and the financial plan are also mentioned in this thesis but in general manner. The authors only want to focus on strengthening the business idea. Therefore, these parts will be covered in detail only with the support of outside experts.

1.5 Thesis Structure

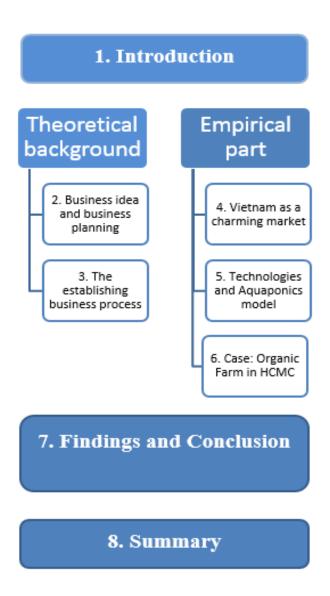


FIGURE 3. Thesis structure.

2 BUSINESS IDEA AND BUSINESS PLANNING

In this chapter, the authors will point out the basic concepts and also the tools to build a convincing business idea.

2.1 Business idea and the defining process

Successful companies are set up by combining three elements which are: the business idea, the management team and the capital. In addition, the business idea not only plays a significant role but also is a starting point for every company. Therefore, the definition of the business idea is presented together with the creating process in this chapter.

2.1.1 Business idea

Money is essential in business world but without money, entrepreneurs can still open business by asking money from investors, making a loan from banks. The management team is also one of the critical elements because choosing the right team will bring a faster success to a company. However, forming a team is a difficult process that requires a great deal of time, energy and sensitivity. So entrepreneurs need to start it right now and keep working on it during the entire planning process (McKinzey 1998, 28). Besides, the most important element is the business idea. Without the business idea, there is certainly no business. However, the business idea is not the end of the creative process. It is the starting point for every single successful enterprise and also the first milestone in the starting up process of a fast growing company. Many people just fail because of not understanding that business idea needs to be matured and developed before facing the challenges of pursuing financing and the market. This process usually requires a lot of time. (McKinzey 1998, 30.)

To be successful in creating a business idea, the perspective of investors and the benefits of the customers have to be considered carefully. The idea is that the entrepreneurs has to answer these basic questions:

- Who are the customers?

- What are customer's benefits? Or what problem does the idea solve?
- What is the market?
- How will it make money?
- What are the competitive advantages of the new company?
- How much financial funding is needed and how profitable is the plan?

2.1.2 The defining process

The model is a "representation of something, either as a physical object which is usually smaller than the real object or as a simple description of the object which might be used in calculations" (Cambridge 2012).

The business model systematically describes what enterprise's business components are, and as a whole, harmonizes them together to generate values for its customers. In short, a business model describes how an organization creates, delivers, and captures the values (Osterwalder 2010, 14). An effective business model is able to fulfill managerial matters, such as: Who are potential customers? How to reach and satisfy their needs? How to profitably deliver values to target customers? How to run the business cost-effectively? The business model performs as a firm foundation for building up a feasible business was proved by many researchers and stories (Harvard 2010).

The business model usually involves in the defining process of business idea in order to create a big picture. There are several business models such as: the existing dynamic business model Hoffren's (2002), Osterwalder's (2010) business model canvas and the atomic business models of Weill and Vitale (2001). An overview of these business models are prived in this section.

Hoffren's Business Model

There is a structure of a business plan which includes: the basic information of the business and the founder, the reasoning for finding of the company and business idea, the objectives of business, the financing demand, the strategie, and the analysis of the business. The structure of Hoffren's business model is similar to the business plan structure. However, in this research, the authors may only use

the dynamic business idea model which is simple and concise to create the general idea for their business. (Hoffren 2002, 39.)



FIGURE 4. The business model Hoffren (modified from Hoffren 2002).

The dynamic business idea model made of six elements displayed in figure 4. These six elements are following: the market need, the image, the product/service, the target group, the mode of operations and the resources that consisting of physical, finance and human. With these categories, the business idea can be clearly identified and represented (Hoffren 2002, 35).

Osterwalder's Canvas Model

Quite similar to the Hoffren dynamic business idea, the Canvas business model is also a strategic management and entrepreneurial tool for developing something new or documenting the existing business model. It can be the best described through 9 basic blocks which are: the key company partners, the key activities, the key resources, the channels, the value propositions, the customer relationships, the customer segments, the cost structure, and the revenue streams. All these 9 basic blocks cover four main areas of the business: the customers, the offers, the infrastructures, and the financial viability. In total, the Canvas model looks like a blue print for a strategy to be implemented via an organizational structure, a process, and systems. (Osterwalder 2010, 14-21.)

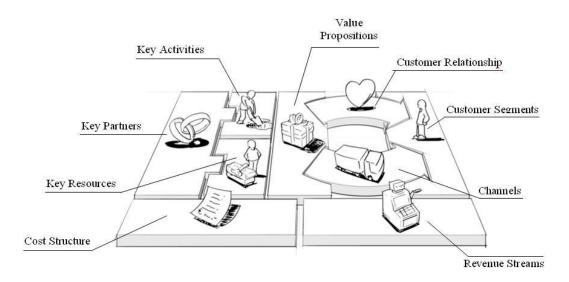


FIGURE 5. The business model Canvas (modified Osterwalder 2010, 14-21).

Weill and Vitale's Atomic Business Model

The Atomic Business Model is a description of the roles and the relationships among consumers, customers, allies and suppliers of a firm. It also identifies the major flows of products, information, money, and benefits to all include elements. (Vitale & Weill 2001, 39.)

The Atomic Business Model consists of 8 different atomic business models. Each model describes a various way of conducting a business electronically and they can be combined to form a business idea.

Weill and Vitale (2001, 36) had developed the e-business model schematic which assists analyzing business initiatives. The schematic is basically a graphic representation and it aims to emphasize the business model's important elements. Its help to uncover the major contradictions of a business model to emphasize the core competencies, to show the position of each player in the industry value chain, to deduce the organizational form and IT infrastructure for implementation; and to reveal which entity owns the customer relationships, datas, and transactions. However, the models are mostly used for the e-commerce business. Thus, it limits the users of the models. (Vitale & Weill 2001, 42-54.)

2.2 Business planning and the important role

After defining the business idea, the next stage is how to launch it into the real business world. The business plan is a tool to help implement the business idea into reality. In this part of the thesis, the authors will quickly discover what is business plan and discus the importance of it.

2.2.1 Business Planning

A business plan is a written document which indicates an entrepreneur's proposed venture. It describes the business ideas of new products or service throughout the plan production, marketing, and finance. The business plan is also the entrepreneur's road map on the journey towards building a successful business. The content of the business plan often includes the goals, the vision, the current market and the situation of a company, a plan of how to implement and completes the business idea. (Raymond 2009.) Others consider the business plan as a document that aims to achieve the most advantageous and workable compromise between what companies wants to do and the ability of implementing it. (West 1995, 11.) Another expectation is that a business plan is a detail report of a company's product or service, production techniques, market and clients, marketing strategies, human resources, infrastructure and supply requirements, financing requirements and the using of funds. The business plan also describes the past, and the present of business's status. Its also presents the future of an enterprise as its own purpose. (Sauvant and Nguyen Tran 2002, 3.)

The readers of business plan are mostly the key employees, the board of directors and shareholders, selected business partners, and current or prospective lenders and investors. However, the most important target readers may be potential lenders or investors. Moreover, there are many possible sources that could be approached with the business plan, such as:

- Commercial banks: these provide loans to viable businesses on standard market terms and conditions. The bank may require the interest rate depends on the prevailing macroeconomic conditions in a country, but also on the risk the bank attributes to a project
- Private investment funds: the objective is to make a profit by scrutinizing the business until getting substantial return on the equity at a calculable risk. They can finance your business by placing equity without requiring collateral. On the other hand, expecting a good share of the profit and demanding a control function in the business are sometime applied.
- Development funds: Such venture capital funds are established and supported primarily by the governments or the governmental institutions and have a social and macroeconomic development objective. They are willing to take more risks and only participate in a limited period of time. And the most important thing is they favor the business with special social and environmental benefits.
- Multilateral development institutions: here are the most promised multilateral development institutions: The International Finance Corporation (IFC), The European Bank for Reconstruction and Development (EBRD, The Asian Development Bank (ADB), and The Inter- American Investment Corporation. (Sauvant and Nguyen Tran 2002, 6.)

2.2.2 The Important Role of Busines Plan

With a well-written business plan, the way to profit for any new or existing business will be shortened. In another words, every business will benefit from the careful preparation and writing of a business plan.

According to Linda Pinson (Pinson 2003), there are three main purposes for writing a business plan:

-To serve as a guide: the business plan serves as a guide that gives directions throughout the business lifetime. The business plan is a blueprint and will provide tools to analyze and implement changes that will make the business more profitable. It will provide detailed information on all aspects of the company's past and current operations, as well as the future in the next few years. For new business owners, a business plan will give information on projects which is developed through current research of the industry. The validity will increase if the plan is kept up-to-date. All the factors such as current financial statements, updated rate sheets, recent marketing information, and other data need to be added into the plan.

-As documentation for financing: when seeking financing, the business plan is always the first requirement. The plan will give details on how the desired investment or loan will further the company's goals and increase its profits. Every lender or investor always wants to know how the cash flow is maintained; how the loan is paid back on a timeline basis; how the investment will improve the overall net worth of the company and achieve the return on investment. Therefore, the business plan needs to be detailed on how the money will be used and it should back up all figures with solid information.

-To work in foreign markets: in international business, a business plan provides a standard means of evaluating the potential of a business in a foreign marketplace. Furthermore the potential of the international commerce can bring big changes in communications, technology, and transportation. Thus, the development of a business plan will help the business complete in this global economy.

Beside these purposes, there are also many reasons for writing a business plan. Here are some of the most significant ones:

- Getting an integrated view of your business: business plan helps to identify better target clients, outline market segment, shape pricing

strategy and define the competitive conditions under which must be operated in order to succeed. It also ensures that all these considerations are consistent and properly harmonized. Competitive advantage or new opportunities as well as deficiencies are discovered in the process of business plan.

- The plan not only ensures the improvement of the managing ability but it also helps avoid problems before they arise.
- Determining financial needs and applying for funds: the plan helps to determine the amount, type and sources of financing and when it is required.
- Approval from board of directors/shareholders. Using it as a basis for getting approvals from the company board and shareholders.
- Recruiment: using it in recruiting and introducing new members of the management and staff.
- Deriving objectives for employees: deriving from the business plan measures and objectives for units and individuals in the organization (management by objective).
- Informing employees: using it as a means of informing/motivating employees about the objectives of the company.
- Informing lenders: giving it to banks/investment funds that have financed your business in the past and require periodical information for monitoring purposes.
- Informing partners: using the business plan to inform the business partners and other relevant organizations.

3 THE ESTABLISHMENT OF THE BUSINESS PROCESS

According to Uusyritykeskus (2004), the establishment of the new business process is broken into 5 steps which are illustrated in the figure below. However, in this chapter, the authors will not go through and discuss all the steps with reference to the scope and limitation of the thesis. The authors only discus carefully determining business idea step, creating an initial business plan, planning Financial Plan, and lastly is to chose the right form of business. Other steps will be analyzed and discussed in further research.

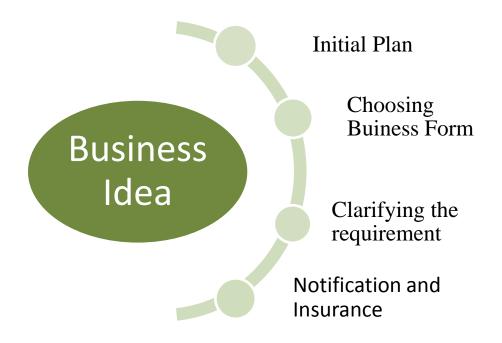


FIGURE 6. Stages in establishing a business in Finland (modified from Uusyritykeskus 2004).

3.1 Good business idea

In chapter 1, the authors explain what make a business idea become successful and introduce 3 business models to help identify and modify business ideas. In this thesis, the authors will use only the Canvas model because it provides most of the criteria of the business idea. It is clear, easy to use and displays the entire concept of the business idea.

In this part of chapter 2, the authors decide to discuss deeper on the Canvas model and use it as a guideline to create a perfect picture of the business idea in the practical part.

As mentioned above, the business model Canvas consists of nine building blocks which focus on four main areas of business: customers, offers, infrastructures, and financial viability.

Customer Segments

The Customer Segments Building Block defines the different groups of people or organizations who aim to reach and serve. According to Osterwalder, the customer is the heart of any business model and without customer, no company can survive. Therefore, the Customer Segments building block is considered as the first significant part. In order to satisfy customers, the simple way is to group them into distinct segments with common needs, common behaviors, or other attributes. Then the organization or entrepreneur must make a conscious decision on which segment to serve and which segments to ignore. Only when the decision is made, the model can be designed base on a strong understanding of specific customer's needs. (Osterwalder 2010, 20.)

There are different types of customer segments. Osterwalder analyzed 5 common types such as the mass market, the niche market, the segmentation, the diversified market, and multi-sided platforms. In the mass market, the enterprises only focus on large group of customers who have similar needs and problems. In contrast, the niche market requires the value propositions to be delivered to the distinct needs of specific customer segments. A diversified type is a type with more than two unrelated customer segments with very different needs and problems. On the other hand, the multi-sides markets concentrate on two or more interdependent customer group. (Osterwalder 2010, 21.)

Value Propositions

Value Propositions building block is basically understood by describing the bundle of products and services that create value for a specific customer segments. It solves the customer problems or satisfies the customer need. Some Value

Propositions provides new or innovative offers meanwhile others may add more features and attributes to the existing market offers. (Osterwalder 2010, 23.)

Channels

The Channels Building Block describes the way of communicating and delivering the value proposition to customer segments. The Channels serve several functions which are: raising awareness of products and services, helping customers evaluate the Value Proposition, allowing customers to purchase, delivering Value Proportion to customers, and providing post-purchase support to customers.

TABLE 1. Types and phases of Channels (modified from Osterwalder 2010).

Channel Types		nnel Types	Des Channel Phases				
	Direct	Sales force	sales 1. Awareness How do we raise awareness about our company's products and services? there there	2. Evaluation How do we help custom- ers evaluate our organiza- tion's Value Proposition?	3. Purchase How do we allow customers to purchase specific products and services?	4. Delivery How do we deliver a Value Proposition to customers?	5. After sales How do we provide post-purchase customer support?
Own		Web sales					
		Own stores					
ner	Indirect	Partner stores					
Partner		Wholesaler					

It is crucial to find the right mix of channels to satisfy customer's need. Table 1 illustrates the types: delivering Value Proposition by own company or partner in direct way or indirect way; and 5 channel phrases: awareness, evaluation, purchase, delivery, and after sales. An organization has the ability to choose between its own channels, partner channels, or both of them when reaching its customers. Depending on the strategic plan and the financial viability, the company chose the relevant channels since each channel has its own pros and cons. The own channels create both high margin and operating costs. Meanwhile, the partner channels create a speedy product availability base on the cooperation network but with low margin results. (Osterwalder 2010, 27.)

Customer Relationships

The Customer Relationship Building Block describes the types of relationship between the company and specific customer segments. The customer relationship

can be ranged from personal to automate and it may be driven by the motivation of customer acquisition, customer retention, and boosting sales.

Osterwalder et al have distinguished several categories of customer relationships which are: personal assistance, dedicated personal assistance, self-service, automated services, communities, and co-creation. The personal assistance is based on the human interaction between customers and customer's representative during the purchasing and the post-purchasing process. Besides, the dedicated personal assistance focuses more on and emphasizes the intimate and individual relationship with long-term customers. With self-service, there are no direct relationships between company and customers except the necessary means for customers to help themselves. On the other hand, automated services assist customers by providing information or recommendations customized to their personal interests. Increasingly, companies are utilizing user communities to become more involved with customers and facilitate connections between community members. By doing so companies have chances to observe and obtain customers insight. Co-creation is kind of relationship between customers and companies who invite them in create value proposition process. (Osterwalder 2010, 29.)

Revenue Streams

The Revenue Streams building block represents the cash which is generated from each customer segment to company or simply the monetary flow within the organization. (Osterwalder 2010, 30.)

There are several ways to generate Revenue Stream, such as: the asset sale, the usage fee, the subscription fees, lending/renting/leasing, licensing, the brokerage fees, and the advertising. Each Revenue Stream might have different pricing mechanisms. And choosing the right type of pricing mechanism can make a big different in terms of revenues generated. There are 2 types of pricing mechanisms: the fixed and the dynamic pricing. (Osterwalder 2010, 30.)

Key Resources

The Key Resource Building Block represents the most important assets which are required to make a business model work. Different types of business models require different kinds of key resources. These resources allow an enterprise to create and offer Value Propositions, reach markets, maintain relationships with customer segments, and revenues. (Osterwalder 2010, 30.)

In general, the key resources can be categorized by physical, intellectual, human, financial. Physical resources include tangible assets and distribution networks. Intellectual resources are brands, proprietary knowledge, patents and copyrights, partnerships and customer database. They are increasingly one of the important components in business model. Human resource is one of the fundamental elements in every business model. Without human resource, there is no business. Financial resource represents the monetary needed for running the business. Entrepreneurs can acquire financial resource by many ways such as borrowing or investing their own money, etc. (Osterwalder 2010, 34.)

Key Activities:

The Key Activities Building Block indicates the most important thing the company must do to make its business model work. Similar to Key Resource, Key Activities are various depending on the type of business operation model. They can be categorized as: production, problem solving and platform/network. Production activities relate to designing, making, and delivering a product in substantial quantities and/or if superior quality. Problem solving activities are activities giving the solutions to individual customer problems. Platform/network activities dominate the business models which chose key resources as a platform. Key Activities in this category relate to a platform management, a service provisioning and a platform promotion. (Osterwalder 2010, 35.)

Key Partnerships

Key Partnership Building Block describes the network of supplier and partners that make the business model work. The companies create alliances to optimize their business models, reduce risk and acquire resources. Therefore, the partnership becomes a cornerstone of many business models. (Osterwalder 2010, 38.)

There are four different types of partnerships which are illustrated in the figure 6 below:

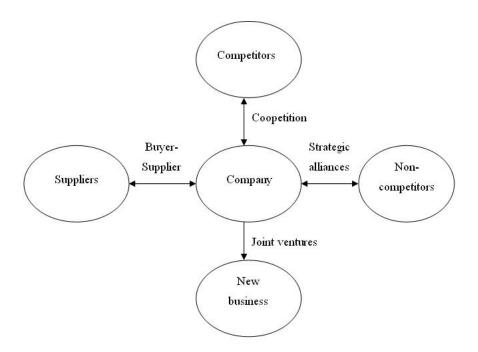


FIGURE 7. Types of partnerships (Alexander Osterwalder, Yves Pigneur, 2010, p. 38).

Cost Structure

This Building Block is the last Block in the Canvas model which represents all costs incurred to operate a business model. The cost could be creating and delivering values, maintaining customer relationships, and generating revenues. After defining the Key Resources, Key Activities, and Key Partnerships, the cost can be calculated relatively and easily. (Osterwalder 2010, 40.)

Generally, there are two classes of business model cost structures: cost-driven and value-driven. However, most of the companies try to use the balanced business model of the two extremes. Specifically, cost-driven business model focus on minimizing all the costs wherever it is possible. The purpose is aiming at creating and maintaining the leanest possible cost structure, using low price Value Propositions, maximum automation, and extensive outsourcing. In contrast value-driven model is focus on creating premium value propositions and high degree of personalized services with less concerned in costs. (Osterwalder 2010, 42.)

There are several characteristics of cost structure: fixed costs, variable cost, economies of scale and economies of scope. Fixed costs are costs that remain the same despite the volume of goods or services produced. Variable costs are costs that proportionally with the volume of goods or services produced. Economies of scale are costs that a business enjoys as its output expands and it depend to a larger scope of operations. (Osterwalder 2010.)

All in all, the business model Canvas is the most effective and easily model to use and it help to create a full picture of business idea. Organization should print out the model and brainstorm among key human resources in order to fill up nine building blocks. (Osterwalder 2010.)

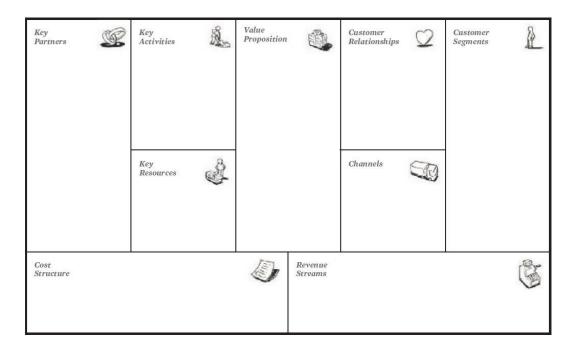


FIGURE 8. The simple business model Canvas (modified from Osterwalder 2010).

3.2 The initial plan

In initial plan, the following issue will be discussed in order: the business vision and mission, operational environment analysis, marketing plan, financial consideration, and risk assessment.

3.2.1 Business vision and mission

According to Hoffren (2002), a new company has to emphasize its goals and vision for the proposed business. Vision is a structured overview of the company at a given time period in the future. It set the direction for a business planning and the vision's description should not be only verbally done but also partly done in a numerical form as well. Thus, it plays an inspirational role and also is a framework for the company's strategic planning. Clear vision should be in every firm. Otherwise, there is no purpose for operating a business. The well created vision must be realistic and credible, and it requires a commitment from the personnel and is the "end product" of planning.

Similar to the business vision, the business mission helps to define the purpose of the business and approachs to achieve success with the business plan. By creating a mission statement, the key parts of the business will be taken to be look at. And a compelling mission statement can convince potential investors about what business is. Remember, a great mission statement does not make up for a poor business plan, but an uninspired mission statement can make investors think twice about putting money on the table. (Peterson et.al 2010.)

A simple distinction between mission statement and vision statement is: a vision statement outlines where the business wants to be in the future and a mission statement will discuss about how the business get where it wants to be.

3.2.2 Operational environment analysis

In the operational environment analysis the authors will discuss about the environment factors such as: the market demand, the market side, the market segmentations, competitors and specially the customer targets. These factors will give the general information of the business and help the entrepreneurs determine the overall market for their business ideas. In addition, the aim of this section is to convince the investors or lenders that the entrepreneur has:

- A thorough understanding of the market
- There is a demand for the product/service
- The plan is sufficiently competitive to get a good share of the market

All of them will be discussed as follow: the market demand, the market segmentations, the market size and growth, the customer targets, and the competitive environment.

The Market demand

The basic definition of a demand is the quantity of a goods/services that customers are willing to buy at a given price in a given time period. The market demand is the sum of the individual demand for a product/service from customers in the market. If more customers enter the market and they are willing to buy products/services, the market demand at each price level will rise. (Riley 2009.)

New entrepreneurs are looking for a growing market demand because it is easy to enter and there are enough customers to be shared among enterprises. That makes growing market demand become a usual driving force for a starting business. Thus, evaluating a realistic position of market demand is the best way to help business decide what, how, where and for whom they deliver products/services. The company can lose a considerable amount of profit by overestimating or underestimating the market. (Kotler 1999, 338.)

There are two available methods to identify the market demand: the market-buildup method which is used primarily by business-good firms; and the market-factor index method which is used primarily by consumer-good firms. The market-buildup methods help business-products firms to estimate the market potential of a city, region, or country based on: determining the entire potential buyers in the market and estimating their potential purchases. The market-factor index method helps consumer-products firm to estimate the market potential for consumer products. (Kotler 1999, 340.)

The Market segmentations

If the demand forecast looks good, the company will decide on how to enter the market. The market consists of many types of customers. The marketer has to determine which segments offer the best opportunity for achieving company's objectives. Consumers are grouped in various ways based on:

- The geographic factor (countries, regions, cities)
- The demographic factor (sex, age, income, education)
- The psychographic factor (social classes, lifestyles)
- The behavioral factor (purchase occasions, benefits sought, and usage rates)

Thus, the process of dividing a market into groups of buyers with different needs, characteristics or behaviors, who might require separate products or marketing strategy is the market segmentation process. Therefore, through the market segmentation, the companies divide the large, heterogeneous market into smaller segments that can be reached more efficiently with products/services that match their unique needs (Kotler 1999, 110).

The market size and growth

First of all, the initial estimation of the market should be made in term of the number of customers, the number of units and the total sales in currency. The enterprise should summarize not only the particulars regarding the current size of the target market but also the growth potential in the short, medium and long term time.

For the start-up business, the market size is more difficult to estimate. In this case, the figures from the number of potential customers or customer segments have to

be analyzed by using market researchs and questionnaires. Alternatively, some interviews with experts on the subject or with people who are most likely to become customers could be conducted. (McKinzey 1998, 79.)

According to UNCTAD (Sauvant and Nguyen Tran 2002, 61), the estimating the growth market, the industry trends, the new technological developments, the socio-economic trends, the government policy, the population shifts and the changing customer needs should be used and analyzed. However the size of the market or the expected potential share should not be overstated because the credibility of the entire business plan will be in question. Here are some sources of information could be used in creating a complete picture of the market:

- The government statistics bureau
- The specialized market survey consultants
- The friendly competitors
- The chambers of commerce and industry associations
- The data bases accessible through the Internet
- The commercial banks

The Customer Target

In this competitive market, in order to be success, the customers need to be a center of a business and the business should delivery great values to them. However, before satisfying the customer, a company should understand the customer's needs and wants. The fact that, companies cannot satisfy the entire customer in a given market – at least not all consumers in the same way. The reason is there are too many kinds of consumers with too many kinds of needs/wants and some companies are in a better position to serve certain segments of the market. Thus, each company must divide the market into small segments and chose the best segments to reach. Then, they should design strategies to satisfy the chosen segments better than competitors doing. Therefore, customer target is the group of customers who are most likely to purchase the products/services from the company. (Kotler 1999, 110.)

First of all, these specific groups must be distinct and large enough for marketing and selling. Secondly, the customers change over time and they have to be

reachable and stable. The segmentation should be performed after a period of time. Lastly, once these groups have been reached, the companies need to act on selling producs/ services that customers want to buy. Even though, not all groups will buy, there is no need to reach them at all (Peruzzi 2010).

The competition environment

Every business will have to face competitors. A company should not ignore its competitors and need to find out who the most important competitor is. In order to challenge the competitors successfully, the business need to search who is the most important suppliers in the market are, what their market share is, how they operate, and what their strengths and weakness are. Make sure that the start-up company understand the competitors and carefully name them and describe why and how the company will be better than them, which make the business plan stand out in the eyes of investors/lenders. Competition today is increasingly between networks, not companies. And the ability to spot faster, learn faster, and work faster as a network is the key competitive advantage (McKinzey 1998, 83).

According to a marketing guru, Theodore Levitt: "The new competition is not between what companies produce in their factories, but between what they add to their factory output in the form of packaging, services, advertising, customer advice, financing, delivery arrangements, warehousing, and other things that people value." In the short run, the most dangerous competitors are those that resemble the company mostly. The customers can't see any differences. Thus, the company is a toss-up in their mind. Therefore, the companies always try to be different at all the time (Kotler 2003, 20).

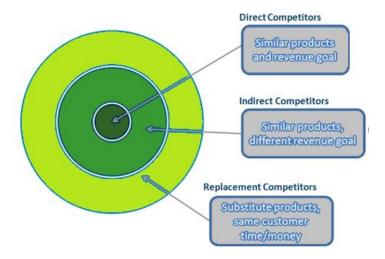


FIGURE 9. The Types of Competitor (modified from Meclabs 2012).

According to Meclabs (2012) there are 3 types of competitors which are shown in Figure 9:

- Direct competitors: are the other businesses who offer the same products and revenue goal. They are probably the most commonly competitors who come to mind first.
- Indirect competitors: are the businesses that provide alternative products/ services to the customers. The products/ services have the same fundamental solutions to the customers' needs. The important is that the customers have several different options in front of them and the business need to compete against any alternative the consumers have.
- Replacement competitors or potential competitors: are the businesses that
 provide products/services that may appear at some point in the future and
 customers could chose instead of the same product/service the business
 offers. This type of competitors needs less concentrate than the others.
 However, the business needs to carefully take into account all the types of
 competitors as well.

3.2.3 The marketing plan

The marketing is "the process of planning and executing the conception, pricing, promotion and distribution of ideas, goods and service to create exchanges that satisfies the individual and organizational objective. (Hisrich 1992.)

One of the key elements in the business plan is the marketing plan. The plan must convince investors/lenders that there is a market for the business idea. Always, the investors would want their expectations of the business growth potential to be met. Therefore, the presentation of a ready-to-run marketing plan is not necessary. The most important elements is the clear statement about the expected market, the pricing strategy, and the distribution. For the readers who have no business experience, a summary of the most important elements of a marketing plan should be included in order to give them an idea of what matters most (McKinzey 1998, 74).

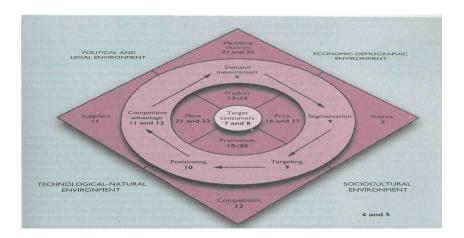


FIGURE 10. The influences on marketing strategy (modified from Philip Kotler 1999, 105).

Once the overall competitive marketing strategy has been created, the details of the marketing mix begin being planned. The marketing mix is one of the dominant ideas in the modern marketing. It is the set of controllable tactical marketing tools that the firm blends to produce the wanted response in the target market. It also consists of everything the firm can do to influence the product's demand. The marketing mix constitutes the company's tactical tool kits for establishing a strong positioning in the target market. Simply there are 4 elements in the Marketing Mix: which known as the "four Ps": the product, the price, the place, and the promotion. It is shown in figure 11 below:



FIGURE 11. The four Ps: the marketing mix (modified from Kotler 1999).

The product means the totality of 'goods and services' that the company offers the target market. The original product idea has already given some sense of the product's characteristics. Now the business needs to make a closer analysis of the various customer segments' needs. Therefore, whether to produce a standard product for all segments or to adjust the product to meet the needs of particular segments is up to the decision of a strategic plan. (McKinzey 1998, 87.)

Products travel through numerous stages of the development: they are introduced in the market at the beginning (introduction); they are accepted by customers (growth); they are wanted by more and more people until the peak (maturity and competition); and then after a period of time, they start to face downturn in the market (decline). (Zimmerer 2005.)

The price is what customers pay to get the product. It is also one of the key elements to compete with the competitors. It is the only element that produces revenue and also one of the most flexibly element of the marketing mix.

Remember that the price can be changed quickly and price decisions must be coordinated with the product design, the distribution and the promotion decisions to form a consistent and effective marketing program. (Kotler 1999, 684.)

The place: (distribution) includes company activities that make the product available to the target consumers. The product or service must actually reach

customers. Behind this simple statement is an important marketing decision. The choice of distribution channel is closely related to other marketing decisions, and affects other measurements which will be taken by the business. Technological developments have greatly expanded the spectrum of distribution channels over the past years. There are some selections of distribution channel: the third-party retail businesses, the outside agents, the franchising, the wholesalers, or the own outlets, agents. (McKinzey 1998, 90.)

The promotion means activities that communicate the merits of products and persuade target customers to buy it. The potential customers must know about the products before it can attract their interests. Thus, the advertising in order to get noticed provides information, persuade and create the confidences. The advantages and the "customer benefits" of the products or services need to be explained to the customer targets. According to MacKinzey (1998, 90), there are various ways of getting your customers' attention:

- Classic advertisings: newspapers, magazines, specialist publications, radio,
 TV, cinema
- Direct marketings: direct mail to selected customers, telephone marketing,
 Internet
- Public Relations: articles about your product, company, you personally, in the print media, written by you or a journalist
- Exhibitions, trade fairs
- Customer visits.

3.2.4 The financial considerations

In the financial consideration part of the business plan, there are three questions need to be answer. The first question is how much money will be taken to launch and run the business successfully. This will estimate the required money of the business. The second question is how much cash is required to be available at any given moment for the company to be able to meet its current liabilities. They are the key of financial planning task. The last question is how and from where the fund can be obtained. In most cases, the management team can only provide a

fraction of the funds required. Therefore, finding investors are essential and important for the company. (McKinzey 1998, 123.)

The following list is the major elements which should be included in the financial part of the business plan:

- The financial history/ Start-up Cost.
- The income statement projections/budget
- The balance sheet projections,
- The cash flow projections
- The important financial ratios

Because the thesis purpose is creating a new business; the first part of financial should be a start-up expense rather than financial history. To calculate the start-up expense, the entrepreneurs need to make three simple lists with a few educated guesses advices and then adding them all up. The first list is the list spending on assets which are needed to use in the business over the long term. The second list is spending on expenses which is all money need to spend to other things than assets, such as: legal set-up fee, website building fee, etc. The last list is the list on how much money in the bank needed to get started the business. This is critical and important because this money will keep the business servive in the first year with/without profit from sales. Then the sum of all the cost will be made to get the total Start-up cost. (Berry 2011.)

The income statement is also known as the profit and loss statement. It shows the revenue from sales, the expenses and the net profit (or loss) of business.

The Net Profit/Loss = Revenues – Expenses

An income statement should be broken down by month or by quarter for the first year. Then the second year can be broken down quarterly and the next year could be presented on an annual basis. The income statement analysis should be made briefly and presented in the business plan. (McKinzey 1998, 125.)

TABLE 2. The Income Statement (modified by Sauvant and Nguyen Tran, 2002).

Item Planning years- new company	Xxx1	xxx2	Xxx3	xxx4
Total net sales	20*****	:carras	1010	****
Other operating revenues			222	
= Total revenues	****	****		****
- Cost of goods sold				
= Gross profit				
- Selling, general and administrative expenses				****
= Operating profit (EBITDA)*	*****			
- Depreciation	1	2.000	25.22	8553
 Interest expenses / + income 	11111			
 Extraordinary charges / + credits 		Service.	60,000	3,000
Corporate tax	****		927	*****
= Net profit (loss)	****			

The cash flow will demonstrate the flow of cash in the business which is not shown in income statement and balance sheet. There are two basic elements of business's cash flow (McKinzey 1998, 125.)

- Cash inflows: are the movement of money into business such as from sales, account receivable, interest from bank, short-term invest, etc
- Cash outflows: Is the movement of money out of the business such as all the operation expense, short-term and long-term loan, tax, insurance, etc.

The balance sheet is a statement of the company's wealth or the financial position at a given date. It provides a picture of the business at a specific moment, but does not reveal the process of the business. The open balance sheet is needed to include in the business plan for the start-up business. The large asset or liability categories that are lumped up without the detailed information should be avoided. The balance sheet consists of categories of items which are shown by figure below.



FIGURE 12. The Balance sheet equation (modified from McKinzey 1998, 135).

The financial ratios are derived from information included in the income statements and balance sheets of the business plan. All the ratios are used as indicators for:

- Providing a picture of the financial health of the business throughout the ability to generate profit, paying loan and utilize its assets efficiently.
- Comparing the performance between business and competitors
- Monitoring the changes in the performance
- Assessing whether certain operations need fin-tuning.

There are four different types of ratio which are liquidity ratios, efficiency ratios, profitability ratios and solvency ratio. (McKinzey 1998, 139.)

3.2.5 The risk assessment

The Oxford English Dictionary definition of risk is as follows: 'a chance or possibility of danger, loss, injury or other adverse consequences' and the definition of "at risk" is 'exposed to danger'. In this context, risk is used to signify the negative consequences. However, taking a risk can also result in a positive outcome.

Every enterprise always involves risks, and when starting up a company, these risks could be shared with investors/lenders. By including the risk assessment in the business plan, the investors/lenders know that the owners have thought through the business idea. If there is no risk assessment in the business plan, they will assume that the presentation of the business idea or the development of the business is over-optimistic. However, the risk assessment should not take up more space in the business plan than the opportunities. Otherwise there is something wrong with the plan. (McKinzey 1998, 120.)

Risk management focuses on the recognizing, the analyzing and the managing predictively the threats associated with its operations. The solutions need to be found for five major risks which are threatening the company in the short-term and the long-term operations: the reputation risks, the financial risks, the operation risks, the business strategy risks, and the hazard risks. However, the volume and

complexities of risks which influences the enterprises are constantly increasing. The changes in information technologies, the outbreak of globalization and the increased competition will bring the company's executives difficulties. (Hopkin 2002.)

3.3 Choosing the Form of Business

An entrepreneur can start up a business as a private entrepreneur, a general partner-ship, limited partnership, or a private limited company. The choice of company depends on several matters: the extent of the business activity, the size of personnel, the required capital, the risk exposure, and the profit distribution. (Uusyritykeskus, 2004.)

In this part, the business forms in Vietnam will be presented below and analyzed the requirement also the place to register according to Ministry of Planning and Investment in Vietnam (2013).

Limited liability Company

- Features: member of an LLC is responsible for the debts and liabilities of the enterprise to the extent of the amount of capital that the member has contributed or committed to contribute to the enterprise. The contribution of a member can be transferred only in accordance with Article 32 of the Law on Enterprises. Members may be the organizations and the individuals. The number of members does not exceed 50 people. Limited Liability Company cannot issue shares and the company will be legalized from the date of registration of the business.
- Place of Business Registration: registration at the Department of Planning
 & Investment in every city.

The Joint Stock Company:

• Features: a JSC is an enterprise whose charter capital is divided into shares held by three or more organizations or individuals. A JSC is a recognized legal entity under Vietnamese law and shareholders are responsible for the

debts and liabilities of the enterprise to the extent of the amount of their contributed capital. A JSC has the right to issue securities in order to raise capital and it may list on the Securities Exchange; shareholders have the right to freely transfer their shares to another person, except as provided in Clause 3, Article 55 and paragraph 1 of Article 58 of the Law on Enterprises; shareholders may be organizations or individuals; minimum number of shareholders is 3 and the maximum number of constraints.

Place of Business Registration: registration at the Department of Planning
 & Investment in every city.

Partnership: general partnership and limited partnership

- Features: is a contractual relationship akin to a partnership which does not create a new legal entity but which is licensed to engage in business activities in respect of a specific project in Vietnam. It must have at least two partners: general partners and limited partners; the partnership members must be individuals with professional qualifications and responsible with their entire assets of the company's obligations; limited partners are only responsible for the debts of the company to the extent of capital contributed to the company. A partnership is not issued any securities.
- Place of Business Registration: register Partnerships in Business & Investment Planning Department in every city.

Private enterprise:

- Feature: A business owned by an individual who shall be responsible in all of their assets every business activity.
- Place of Business Registration: register at the Department of Planning & Investment in every city.

Business Venture:

- Feature: The joint venture is now operating under the Law on Foreign
 Investment in Vietnam. It is established in the form of limited liability
 Company, a legal entity under the law of Vietnam. At least one party is a
 foreign investor.
- Place of Business Registration: Depending on the investment project, the
 following agencies will provide the investment licenses: Ministry of
 Planning and Investment, the provincial People's Committee, the
 Management Board of industrial zones. Special Projects is provided by
 Government decision.

Enterprise with 100% foreign investment

- Features: 100% foreign enterprises outside the enterprises operating under the Law on Foreign Investment in Vietnam. It is established in the form of limited liability Company, a legal entity under the law of Vietnam.
- Place of Business Registration: Depending on the investment project, the
 following agencies will provide the investment licenses: Ministry of
 Planning and Investment, the provincial People's Committee, the
 Management Board of industrial zones. Special Projects is provided by
 Government decision.

Individual Income Households

- Features: an individual or a household is the owner and business's location is always fixed, unusually hire employees, no seals and responsibility with their entire financial property with business activities.
- Place of Business Registration: Business households can conduct business registration at the Business Registration Office DPC.

4 VIETNAM AS AN ATTRACTIVE MARKET

4.1 Evaluation of business environment in Vietnam

In this chapter, authors will discuss some elements that have been affecting on doing business in Vietnam, specifically in Ho Chi Minh City.

Economic

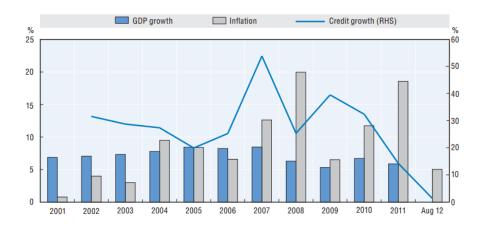


FIGURE 13. The GDP, Credit and Inflation growth in Vietnam (OECD 2013)

We can see from the figure above, the economic growth: GDP reached 6-6.1 % in 2011. However, the inflation escalated to 19 %. According to OECD, the GDP per capita at PPP is 3359 (USD) until 2011. This is really a positive number for the development of Vietnam.

The economy of Vietnam is in the process of transforming from underdeveloped commodity economy to developing commodity economy. However, the income of employees and farmers is still low, the purchasing power is low, and so the demand increases slowly. Those lead to the fact that the domestic capacity of the market is limited.

Meanwhile, Ho Chi Minh is a center of education, science, healthcare, industry and culture in Vietnam. Moreover, the population is around 7 % of Vietnam but its GDP share is 21 %. The value from industries is 29.4 %, export value 37 % and it contributes to the State Coffers at 30 % of the whole national value. HCM

City's GDP per capita stands at a threefold difference compared with the national average. The foreign investment into HCMC has accounted for 1/3 the total of Vietnam. (VietTrade 2011.)

Culture

Vietnamese always preserve and promote the nation's traditional cultures. The media coverage is sketched throughout regions, including the remote areas for helping people access the latest information. The education standards are more and more enhanced. The corporate culture has many golden elements of success.

Technology

The State is increasingly focusing on investing into hi-tech fields such as the marine technology and the space technology. The information technology is displaying extraordinary developments. The number of internet users has exceeded 22 millions. More than 50% of population is using mobile phones.

This factor strongly influences businesses directly. The technological factors such as the new production methods, the new techniques, the new materials, the production equipment, the know-how, the inventions, the software applications, etc open opportunities for enterprises to create new products and services with higher quality also to improve competitiveness. However, it also brings the risk of lagging, and reduces competitive ability if they are not caugh up with the technological advances.

In short, Vietnam is a country with full of potentials and with a young population, the consumption is increasing every day. In spite of the predicaments left by war, Vietnam is now one of the most promising places to expand business in Asia. In addition, Ho Chi Minh City is always the most attractive destination for foreign investors.

4.2 The overview of Vietnam's Food Industry

Business Monitor International is an organization based in UK, specializing in the analysis, evaluates the credibilities and the risks of the global markets. BMI

forecasted that the food consumption of Vietnam will increase 5.1 %/year for the period between 2011 and 2016, and reache 29.5 billion U.S dollars in 2016 (estimated data). Meanwhile, the average consumption per capita will rise impressively at 4.3 %/ year, which is equivalent of 316 U.S dollars/year as of 2016. (VietTrade 2012.)

Food consumption growth is impressive due to the following reasons:

- ❖ The increasing of Vietnamese consumers income
- ❖ The development of the retail industry

Currently, the income level in Vietnam is still relatively low compared to the other developed economies and consumers still focus on food and daily essential needs (VietTrade 2012). However, when the income increases, the tastes and preferences of consumers will change. They will concentrate more on high quality, and high value foods, also beverages -branded products that meet their needs.

TABLE 3. Food consumption index – data and forecast of BMI (modified from VietTrade 2012).

	2010	2011	2012	2013	2014	2015	2016
Food	18.69	19.30	22.10	24.28	26.02	27.61	29.50
consumption							
(billion USD)							
Food	212.70	217.30	246.30	267.80	284.20	298.70	316.20
consumption							
per capita							
(USD)							

The SWOT of Vietnam's Food Industry

outside.



Food industry accounts for a significant proportion of output of industries in general and the total GDP, as well as the area that attracts foreign investment in recent years such as Unilever, Nestlé, San Miguel, etc.

Consumers, especially the youth and wealthy class pay increased attention to the branded products like famous European and American brands.

The domestic agricultural products are diverse and abundant so this creates stability for supply and price of raw materials for domestic manufacturers.



There is a big disparity in income between urban and rural areas, creating the differences in consumption level.

In long term, Vietnam's agricultural sector was considered too slow to adopt new technologies to compete with other countries in the world Infrastructure in Vietnam posesses many weaknesses. Roads, railway and seaports do not meet the economic growth as well as links to the world



Joining WTO in 2007 will continue bringing profits for Vetnam exporters, plus increasing competition.

The income increase leads to the change in lifestyle, especially in urban areas, diversing the demand for all kinds of snacks, expensive & convenient food stuff increase.

The support policies of the State.

The tourism industry is booming and bringing profits for commodity packaging products.



Vietnam is a member of WTO so small companies may not afford its existence in the increasingly fierce market.

Vietnam Dong (money) develuation could increase the inflationary pressures.

The rising cost of agricultural commodities may be a risk of profit loss for food manufacturers.

FIGURE 14. The SWOT analyst of Vietnam Food Industry.

4.3 Vegetable market in Vietnam

4.3.1 General Data

When mentioning about the fruit and vegetable market in Vietnam, these following issues will be discussed in this chapter: the vegetable production

capacity in Vietnam, the export's situation and the domestic market of vegetables.

- The first issue is the vegetable production capacity. Currently, the vegetables growing area in Vietnam accounts for a large proportion of arable land. The yield of fruit and vegetables each year reaches approximately 7 million tons, and 90% of the production was supplied for the domestic consumption, only 10% was exported. The Red River delta region becomes the country's largest vegetable production and the Mekong delta region mainly is the fruit production area of the whole country. In addition, besides the Red River delta and Mekong delta regions, there are many other safe vegetables growing areas which have been developed and have been brought steady incomes to farmers such as Hanoi, Hai Duong, Hai Phong, An Giang, Lam Dong, etc. The products have the ability to thrive in both scales and outputs include tomatoes, cucumbers, beans, corn, cabbage, etc.
- The second issue is the export's situation. Since joined the WTO in 2007, the export turnover of Vietnam vegetables has been strongly increased.
 The economic integration has facilitated the market expansion and has served as a good condition for the fruit and vegetable production development.

TABLE 4. The fruit and vegetable export turnover of Vietnam during period 2007 and 2011 (VietTrade 2012, 20).

Year	2007	2008	2009	2010	2011
Export value (million	305.6	406.5	438.9	460.3	622.6
USD)					
Growth (%)	17.95	33.02	7.97	4.87	35.3

Vegetables is also the main exporting product of Vietnam. However, among the major exporting products, the turnover of the fruit and vegetables are very humble. In 2011, the fruit and vegetable export turnover reached 622.6 million U.S dollars, approximately 0.64% of the

total export turnover of the country. In recent data, Vietnam exports fruit and vegetables to nearly 40 countries and territories. Particularly in 2012, the total export turnover of vegetables, flowers and fruits of Vietnam reached more than 800 million U.S dollars (Agroviet 2013). Among agricultural commodities, vegetables are in the 5th place after rice, coffee, cashew nuts and pepper. However, if looking at the growth in exports over the years, there are potential commodities and opportunities to grow due to the demand of the world market. The products of vegetables in Vietnam are increasing compared with the current exports.

• The last issue is the domestic market. According to the Department of Crop Production, Ministry of Agriculture and Rural Development, the vegetable acreage of whole country is approximately more than 823,000 ha. The largest areas such as the Mekong delta, the Red River delta, the South East, the North Central and the largest provinces like Lam Dong, Hai Duong, Thai Binh, Tra Vinh, An Giang, Kien Giang have the yield of over 200 quintal of vegetables / ha (Agroviet 2013). According to Dr. Trinh Khac Quang, the director of Fruit and Vegetable Research Institute, with the favorable conditions, Vietnam can grow more than 120 kinds of vegetables, including nearly 30 major vegetables, accounting for 80% of areas and output.

The trade promotions as well as the brand building are the major challenges for the fruit and vegetable industry in Vietnam. Farmers face many difficulties in accessing the appropriate information channels to capture the demand in both domestic and international market. (Agroviet 2013.)

4.3.2 Safe vegetables compared with organic vegetables

The safe vegetables

Planting safe vegetables is deployed in Vietnam over the past ten years. However, the wish to use safe vegetables of most consumers is still too far away because the vegetables acreage and the yield of safe vegetables is still very modest.

According to the Centre for Agrarian System Research and Development (CASRAD), the area of safe vegetables nationwide is only approximately 0.1%, (approximately 820ha).

The large amount of vegetables are consumed such as cabbage, spinach, Asian water spinach, vegetables and shrinkage, kohlrabi, tomatoes, all kinds of herbs, pumpkin ... Curently, safe vegetables with such modest amount do not meet the demand and it is difficult to reach the consumers.

The reason is that the consumers cannot distinguish the safe vegetables with normal vegetables through visual means (color, freshness and labels). So the customers do not buy the safe vegetables because they cannot distinguish the difference from normal vegetables.

Another drawback is that the price of safe vegetables is higher than normal vegetables. According to the survey by Dr. Tran Cong Thang, most consumers only accept the prices of safe vegetables higher about 20%, very few people accept the doubled price. (Thai 2012.)

The organic vegetables

Firstly, before going deeply in detail, authors will provide some knowledge about the term "Organic" and "Organic food".

According to Oxford Dictionary, "Organic" is relating to or derived from living matter. From this term, there are many other terms such as organic soils, organic farming, and organic food. (Oxford Dictionary 2013.)

"Organic" refers not only to the food itself, but also to the production process. Foods labeled organic must be certified under the National Organic Program (NOP), which is published in October 21, 2002. They must be grown and processed under the using of organic farming methods that recycles resources and promotes biodiversity – two key elements of environmentally sustainable agriculture." (FMI 2005.)

Organic vegetables are one of the important products when mentioning about organic food.

According to Soil Association, organic vegetables are produced by using organic farming. Organic farming is the method in which artificial chemical fertilizers are prohibited and the farmers use techniques such as crops rotation, green manure, compost and clover to fix nitrogen from the atmosphere. (Soil.Association 2013.)

One of the common benefits of organic vegetables is that they taste better and content more vitamins. There are many other benefits that people should consider to use organic cegetables and even other organic products into their ddaily food. The reason is they are completely better for environment. For instance organic farming reduces pollution, helps protect the wildlife and delivers higher animal welfare. Choosing organic vegetables is an effective way to avoid genetically modified (GM) ingredients. (Soil.Association 2013.)

About the position of organic vegetables in Vietnam market, the TH True VEG can be a good example. TH does not choose to sell safe vegetables; they run a good strategy when choosing to sell organic vegetables. Picky customer products are more expensive than the same kind products from 30-60%.

While TH True Milk brand is "storming" in Vietnam's milk market, the "brother" TH True VEG Vegetables grows quite meagerly. TH True opened the retail stores with the name "Hero store", but then most of their stores in Hanoi informed a "Pause" after 2 months of operation. The only product left in the store is squash and they sold these products at a promotional price: 10.000 VND/kg instead 30.000 VND/kg (equivalent 0.5 USD/kg instead 1.5 USD/kg)

Safe vegetables market, including organic vegetables is still quite meager when the production – consumption system has not been completed. Meanwhile, the consumers haven't been familiar with the use of vegetables products bearing the label "safe vegetables" that are sold in the counter, the shelves in supermarkets or stores. According to the Hanoi Industrial and Trade Portal, in 2011, the whole city had 260 stores certified eligible to sell safe vegetables. Now there are just over 100 sale stores are left. (Thoi Bao Kinh Doanh 2012.)

4.4 The current situation in Ho Chi Minh City

According to the Agricultural and Rural Development Department of Ho Chi Minh City, the vegetable consumption of HCMC is about 1200 tons/day. Particularly, safe vegetables are provided only 5-6 tons/day. Notably, this kind of vegetables is being "imitated" by the confusing labels, the brands with the expensive prices, etc. Thus, it is so difficult for consumers to distinguish.

Regarding sensory, the organic vegetables have natural flavors, charming, but less eye-catching colors than safe vegetables. The production process of organic vegetables is quite elaborate, so it is excessively in higher price. That means the price of organic vegetables is higher than safe vegetables. Taking the advantage of this element, many small businesses are willing to exchange the label "safe vegetables" to "organic vegetables", even "blown" the ordinary vegetables to "organic vegetables" or "safe vegetables" to make illicit profits. Ms. Nguyen Thi Anh Ngoc, the chairman of the Cooperative Tho Viet, said that Ho Chi Minh City does not have much organic vegetables for sale. These kinds of vegetables are only sold to restaurants, hotel or high-income consumers. (Thi Hong 2013.)

More specifically, the organic vegetables mainly sell on the internet by ordering online or phone method, and home delivery. Some websites specialize in providing agricultural products not only sell all kinds of clean products but also organic vegetables with lofty price. (Viet Gap, Global Gap is big brands in Vietnam in providing safe vegetables)

At the moment, Vietnam does not have any national authorized organization to certify the organic vegetables but the foreign institutions. Thus, the cost for certification is very high. The head of a cooperative in Hoc Mon district, Ho Chi Minh City, reviewed that product information on organic vegetables is limited and consumers could not differentiate between the ordinary vegetables and organic vegetables. Then, they might buy the wrong one. On the other hand, the trade promotion activities have not been extended and developed. The business network of organic vegetables is still missing, and fewer units are investing on the production. (Nguyen Cam 2013.)

5 TECHNOLOGIES AND THE AQUAPONICS MODEL

The safe vegetables are the big concern of the society. The study of safe vegetables also started several years ago and provided good results. Currently, in the production process, farmers are recommended to use all the organic materials and inorganic materials that contain just enough volume of chemicals, pesticides, nitrates and pathogenic organisms in producing safe vegetables. In fact, it is very difficult to control all famers because of their low awareness and the temptation of the profitability.

In addition, organic vegetables are safe vegetables definitely, but it does not mean that safe vegetables are organic vegetables. Therefore, a solution for producing safe vegetables together with improving soil and water in the intensive cultivation areas is the organic farming. The organic farming methods can be understood as the using of fertilizer materials, pesticides, and growth preparations in the production of vegetables which are derived from the organic, bio and environment-friendly origins. The inputs of production are selected and controlled for matching the organic production's standards. Basically, the output will be safe (International Federation of Organic Agriculture Movements-IFOAM 2003). Thus, applying organic farming methods can ensure producing vegetables safely and stably.

5.1 Modern technologies in producing organic vegetables

In chapter 4.2.2, the organic farming was mentioned generally. In this chapter, authors will go deeply into the details.

Firstly, the organic farming is an agricultural system that seeks to provide fresh, tasty and authentic foods to the consumers while respects the natural life-cycle system (EU Agriculture and Rural Development).

Back to the history, in the Central Europe 1925, Rudolf Steiner created a biodynamic agriculture which is an early version of what called organic agriculture today. Because the model is an ideal concept, organic agriculture began to be developed rapidly in the early twentieth century, not only in Europe,

but also in the United States. In 1940, the term Organic Farming was first used by Lord Walter Northbourne to describe as an alternative to the traditional farming. (Reid 1999.)

Organic farming methods combine the scientific knowledges, the modern technologies, and the traditional farming practices. There are many techniques to be used in an organic farm. However, each technique should not be only used its own. The farmers should combine them at the same time to get the maximum benefits. The methods and technologies that organic farmers use can be summarized as below:

The crop diversity technique

The crop diversity is a distinctive characteristic of the organic farming. The conventional farming focuses on a mass production of one crop in one location, which is called a monoculture. The science of agroecology has revealed the benefits of polyculture (using multiple crops in the same place), which is often applied in the organic farming. Planting a variety of vegetable crops will support a wider range of beneficial insects, soil microorganisms, and other factors. The crop diversity technique helps the environment improve and protect species from the extinction. (Eco Village 2011.)

The crop nutrition (Soil management)

To have healthy and good yield plants, farmers need a good soil management. This relates to the protection of soil life, soil nutrients and soil structure. Artificial fertilizers only provide nutrients for plants in short-term. Therefore, plants cannot withstand droughts, pests and diseases. Artificial fertilizers do not feed the soil or provide organic substances to the soil. Thus, the soil structure will be undermined and the water-holding or drainage ability of soil will not be improved. Farmers should feed the soil by green manures or composts. Then, they will provide good nutrients to the plants later. The important thing is to

remember cultivating the soil at the right time in the right way in order to provide the best living condition for soil and plants. (HDRA 1998, 1.)

The rotation technique

Growing the same kind of crops in the same area annually can reduce the soil fertility and create the condition for pests and weeds. After one year, plants should be moved to another area and do not be returned to original area in the next few years. The crop rotation technique helps build the soil fertility after the plants are grown. (HDRA 1998, 6.)

The composting technique

The composting technique is very important in the organic farming. At the simple way, the composting is the process of making a heap of wetted organic matters and waiting for the materials to rot into humus. Leaves, fruit skins and animal manures can be used to make compost. The composting technique is important because it improves the structure of the soil by adding nutrients. It also increases the water-holding ability of the soil, and reduces pests and diseases (HDRA 1998, 7). The figure 15 shows one of many ways to make compost.

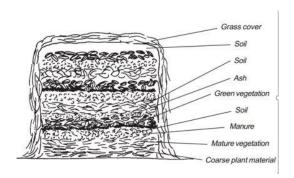


FIGURE 15. The layers of a compost heap (HDRA 1998, 7).

The mulching technique

The mulch is a layer of loose materials such as manures, composts, leaves, and straws or crop residues that cover the ground. The mulching technique also can improve plant growth because it maintains water due to the

evaporation. Moreover, this technique reduces the weed growth by avoiding a large amount of sunlight, and prevents soil erosion by adding organic matters to the soil. Other kinds of mulching technique are black plastic sheeting or cardboard. However, they do not add nutrients to the soil or improve the soil structure. Appling mulch to a warm and wet soil is needed when the soil is dry. A layer of mulch should be less than 10cm. (HDRA 1998, 9.)

The green manure technique

Green manure is a cheap alternative to artificial fertilizers but they are better because of increasing and recycling plant nutrients and organic matters. They also improve soil structure and fertility, control the erosion and prevent the weed growth. (HDRA 1998, 9.)

The weed management technique

The organic weed management is to suppress the weed instead of eliminating the weed. In addition, the weeds can be controlled by hoeing, hand-weeding or mechanical weed machine, covering by mulches, and green manures, etc. (HDRA 1998, 9.)

The controlling technique

The natural pest and disease controlling: the aim is not to eliminate them completely but to keep the balance between pests and predators in nature. If the system is imbalanced, the more popular one will become the dominant. However, pesticides do not only solve the pest problem but also lead to many accidents when using chemical pesticides. Moreover, chemical pesticides can kill useful insects which eat pests. Besides, it can have harmful effects on the environment and health of consumers (HDRA 1998, 9).

Genetic modification is an important key issue of the organic farming. It rejects using genetically engineered plants. In 1998, 600 delegates from 60 countries at the IFOAM's 12th Scientific Conference voted unanimously to exclude the use of genetically modified organisms in the food production

and the agriculture. Again, the IFOAM EU declared they still do not believe that genetically modified crops bring benefits for the society, the environment or the agriculture economic. (IFOAM 2003.)

5.2 Aquaponics model

Beside the normal techniques which are used in an organic farm, authors found that, the aquaponics system is the perfect model. Moreover, it is easy to learn and apply in order to create an organic farm. In this part, the authors will explain what the aquaponics is and the benefits of it.

5.2.1 Key words

Aquaculture: The aquaculture, also known as an aquafarming, is the farming of aquatic organisms such as fish, crustaceans, shellfish and even plants. The term Aquaculture refers to the cultivation of freshwater and saltwater species under the controlled conditions. The aquaculture produces food dishes, bait fishes, ornamental fishes, mollusks, algae, sea vegetables, and fish eggs. (The Young Agropreneur 2011.)

Hydroponics: The hydroponics is the art of soilless agriculture that grows the plants by adjusting the level of water's pH. The minerals require being dissolved and absorbed easily in the water. In fact, many researches have proven that plant roots absorb minerals in water easier than in soil. This method is very economical because the plants do not need much water and fertilizers or pesticides. One more advantage is that, the hydroponics requires less space and they can be implemented in the urban areas. (The Young Agropreneur 2011.)

Aquaponics: Aquaponics is a combination of both methods above, which means a combination of farming fish in tanks and growing plants without soil. In the aquaponics system, plants use nutrients from the fish's wastes and filter the water for fishes. The only thing to do is to feed the fish every day. (The Young Agropreneur 2011.)

Aeroponics: Basically, Aeroponics is a method that grows stuff in the air whereby the roots are suspended in a closed space and sprayed with a nutrient supply. It saves a lot of water. In addition, pests and diseases are controlled easily. Thus, it provides healthy organic products. (The Young Agropreneur 2011.)

5.2.2 Aquaponics basic model

Within the framework of this chapter, a certain number of sources were used to explore the secret of the Aquaponics method. The first source is the personal website of Mr. Trieu Thanh Tuan: http://aquanetviet.org/trieuthanhtuan.

Trieu Thanh Tuan is PhD candidate at the Marine Biotechnology Laboratory, Faculty of Fisheries, Kagoshima University, Japan. He has a lot of important researches. However, he wrote many articles about the Aquaponics model for the beginners. Moreover, he is Vietnamese, so most of the knowledge he mentioned can be applied in Vietnam. For this thesis topic, this is a good source.

The second source is the personal website of Mr. Nguyen Thanh Trung, where he updates the actual situation of his aquaponics garden during the past 2 years: http://www.vn.to/~aquaponics/indoor_ntt_aquaponics.htm.

Mr. Nguyen Thanh Trung is currently living and working in Geneva, Switzerland. He is the Coordinator and Administrative General Secretary of the Eco Vietnam-Association and International Centre (Ecovietnam, 2013). Mr. Nguyen Thanh Trung focuses on implementing the aquaponics system. He has developed from a basic aquaponics system into a mini farm at his living area. The reality of his experience is very valuable.

What plants can be grown in an Aquaponics system?

Normally, people will have this question when they start the Aquaponics plan: "What kind of plants can be grown in the Aquaponics system?" The answer is that, almost all kinds of crops can adapt to the Aquaponics system well. However, the growth of plants depends heavily on the design and the operation of the Aquaponics system. The most important thing is that, the fish's density and plant's density must be consistent and balanced. Farmers need to monitor the

development of crops and then decide whether to increase the density of fish or not. If plants grow well, it means that the density of fishes provides enough nutrients for the plants in the Aquaponics system. In contrast, the density of fishes needs to be increased. The climate and weather problems in the living area are also important in the selection of suitable crops. (Tuan 2013.)

There are some groups of plants that can be grown in Aquaponics systems, such as group cabbage, group legumes, group tuber crops, group fruit trees, group flowers and even the ornamental plants.



FIGURE 16. The group flower for aquaponic system (modified from Tuan 2013).

What are the best fishes for an Aquaponics system?

According to Mr Tuan (Tuan, 2013), fishes play an important role in the aquaponics system, fishes provide the necessary nutrients for the plant's growth.

What kinds of fishes should be selected in the aquaponics system? There are many different species which can be grown in the aquaponics systems, depending on the climate and weather conditions of the living area and the availability of supplies. However, the aquaponics system requires freshwater species, because crops in the system can grow only if the water supply is the fresh water.

There are some groups of fishes that are suitable for the market in Vietnam. For example, group catfish, group giant gourami, group tilapia, group perch, and group carp are easy to grow and gain weight rapidly. In addition, there are many other species that depend on preferences, needs and available conditions, such as crayfish, tortoise, turtle, etc. Shrimp will be much more difficult than fish and it requires farmers to grasp some basic techniques for caring shrimp in the aquaponics system.



FIGURE 17. The fish group for organic system (modified from Tuan 2013).

How to build a basic Aquaponics system?

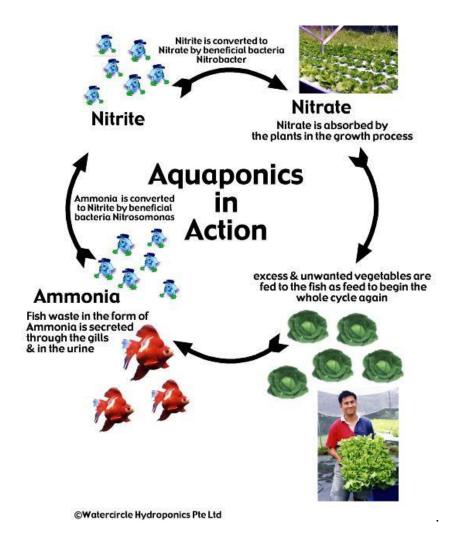


FIGURE 18. The Aquaponics in Action (modified from Trung, 2013).

As mentioned above, the aquaponics system is the combination of both systems: the aquaculture and the hydroponics. This combination brings the real benefits and the uniqueness for the aquaponics system. Instead of using fertilizers and chemicals to grow plants, the aquaponics model uses fish's wastes due to the metabolism from microorganisms into nutrients that is necessary and sufficient for the growth of plants. Conversely, instead of discharging the wastes into the environment, aquaponics uses plants to filter the water and that water will return to the fish tank like the beginning. This water can be reused indefinitely and just

need to be refilled when it decreased due to evaporation. This is a perfect closed circulation system.

Nitrogen Cycle

An intangible factor which plays an extremely important role in the aquaponics system is microorganisms. The bacteria do not require to be added into the aquaponics system because this model will develop by itself and operate the system stably. There are two different types of bacteria which are involved in the conversion of fish wastes into nutrients. Nitrosomonas will convert the ammonia into nitrites. Nitrite is then converted to nitrate by Nitrobacter bacteria. Finally, plants can then consume nitrate to grow.

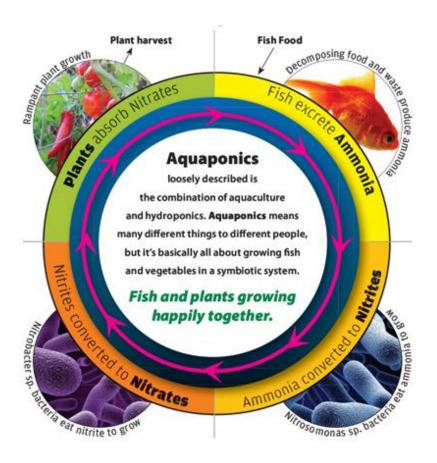


FIGURE 19. The nitrogen cycle (modified from Vietnam Aquaponics 2011).

The figure 20 shows a good illustration of the basic aquaponics system. Plants are raised only with wastes from fishes. Fish tanks are placed in the bottom with a pump inside, to pump water to feed the plants and the plants help purify the water for the fish. The whole system will operate automatically.

The only thing to do is to feed the fish every day. Fishes should be fed frequently, but enough.

Fish's manures will be dissolved into ammonia, which are toxic. The bacteria (Nitrosomonas) living in the water of the fish tank will consume ammonia, and then, discharge nitrites, which are also highly toxic substances. Next, the bacteria (Nitrobacter), also living in the water, consume nitrites and release nitrates. This is a very precious substance in the aquaponics system, because nitrates are the good fertilizer for plants. If there are enough plants to absorbed nitrates, the water is naturally filtered, and flows back to the fish tank. The water in the fish tanks is always clean if there are sufficient plants to consume fish's manures. Plants are lush if there are enough fish's wastes to feed the plants.

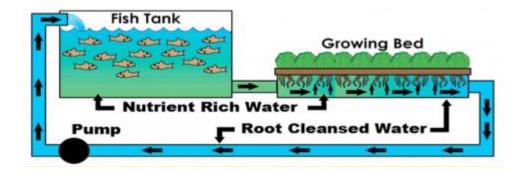


FIGURE 20. The basic Aquaponic system (modified from Tucson AquaPonics Project 2012).

6 CASE: ORGANIC FARM IN HOCHIMINH CITY

In this chapter, the business idea of creating an organic farm in Ho Chi Minh City is introduced. The case company is related to a plan of a "start-up company". However, the authors just focus on the business idea, and try to create a preliminary business plan. Later, the future research will be proposed in the next chapter together with the final decision.

6.1 Business idea

In the actual business plan, the executive summary is always introduced in the first part. However, in this research, the authors want to use the Canvas business model to replace the executive summary. The general picture of a business idea will be completely presented as below:

Key partners -Fish & Vegetable suppliers -Landlord -Agriculture professors	Key activities -Producing Vegetables and fishes -providing education of Aquaponics system Key Resources -Infrastructure -knowledge of Aquaponics technology -local labors	technology for food industry -Creating a sustainable business model		Customer Relationships -Personal assistance Channels -Own store -Online store	Customer segments -Luxury restaurants/hotels -High income families -School cafeterias - Gardening family
- Land and facilities - Cost of controlling and maintaining Aquaponics system - Marketing, distribution, etc.		Revenue Streams -Sales come from selling products -training cost			

FIGURE 21. The business idea.

The Customer Segmentations:

The business idea focuses on the niche market which includes 2 main segmentations. Because of the nature and the current situation of the organic food in Vietnam, it is not considered to be sold in the mass market. Therefore, the

organic products will be sold only to the luxury restaurants, and high income families. They are willing to pay more to get the better quality food.

The value propositions:

The organic farm, together with other suppliers, will satisfy the demand of the organic food in Ho Chi Minh City market. They are improving the quality of food in society by offering high quality organic vegetables and fishes. The Organic Farm's mission is to raise the awareness, as well as the habit of eating healthy food. Finally, by applying the aquaponics system, the sustainable business is created. This is one of the most important value propositions that the company wants to bring to the society.

The channels:

There are hundreds of channels to reach the customer segments. Therefore, the entrepreneurs need to choose carefully to maximize the effectiveness. According to the nature of products, together with the scope and scale of the farm, and the customer segmentations, the direct channels are more effective than the indirect channels. Thus, the Organic Farm will put more effort in the direct channels in order to reach customers. The direct channel includes the own stores and the online store. Also, the multimedia channels are utilized to do the marketing as well as the customer services.

The customer relationship:

The personal assistance is necessary for the company to maintain the customer relationships. With the personal assistance, company can communicate directly to the customers in order to help them during or after sales process.

Revenue Streams:

As described in the value proposition column, the Organic Farm offers vegetables and fishes in the market. Therefore, the revenue will be generated from selling organic food.

Key Resources:

The key resources are grouped into 4 categories which are:

- Physics:

To establish the organic farm, the first physical asset will be the land field. It could be rented or be bought depending on the initial capital of the project. The next physical asset is the equipments for the aquaponics system.

- Intellect:

The important intellectual resource for the organic farm is the knowledge of running the aquaponics system. It is also the business model which is developed in a sustainable way. Thus, the farm's brand will be distinctive among other brands.

Human:

The human resource in the start-up process involves only owners who are passionate in the agriculture and want to change the food quality perspective in Vietnam. The local labors can be used to help owners to achieve their mission as well.

- Finance:

The financial resource mostly consists of owner's investments, and loans from the government or the bank.

Key Activities:

In the key activities, the main activity is offering organic foods to the market. However, the Organic Farm also solves the problem of customers by satisfying the demand of the high quality and healthy food in the market. More than that, the Organic Farm also provides knowledge on how to grow food in the garden as well.

Key Partnerships:

The key partnerships of the Organic Farm must be the suppliers who provide vegetable seeds and fishes. Other key partnerships are the professors of the aquaponic system to consult and provide the technical support for the Organic Farm.

Cost Structure:

The Organic Farm's fund is spent to acquire the facilities and land, to controle and maintain the system, to run the distribution channel, to create a social media platform and online webpage, and to cover production cost. These are the general costs of the Organic Farm which will be faced and focused to minimize.

6.2 Company's description

In this part of the thesis, the basic information of the company and owners will be introduced.

TABLE 5. Basic Information of the business.

Name	The APO Organic Farm
Business Form	The Limited Company
Industry	Food Industry
Business Region	Ho Chi Minh City, Vietnam
Location	Cu Chi District
Business Vision	To be the first Sustainable Organic Farm in Vietnam
	this inspires and supports well-being and respect for
	all beings and for Mother Nature.
Business Mission	To be a trustworthy and innovative local leader in
	providing genuine organic products and solutions for
	conscious, healthy living

Next, the information of the owners will be introduced by the table below:

TABLE 6. Basic information of the founders.

Name	Nguyen Chanh Tri	Truong Minh Thuan		
Education and	Diploma in Business			
experience	Management 2009			
	Bachelor of International B	usiness in 2013		
Financial	Own Assets: 600 000 000 V	/ND		
Resource				
Motivation	With the love in agriculture	and passion in improving the		
	quality of food in Vietnam, owners want to find and apply the			
	new technology to provide the high quality organic food to			
	Vietnam market. Secondly, there is a high demand for organic			
	food in Ho Chi Minh City market. Thirdly, the Organic Farm			
	applies one of the sustainable technologies which is the			
	aquaponics system.			

6.3 Market situation

In this part of chapter 5, the quick analysis of the market will be presented. Based on the environment of the market, the segmentations will be analyzed. Then the authors will define the target customers as well as the competitors.

6.3.1 Market demand

Ho Chi Minh City is located in the Southern Vietnam. It is the biggest transport hub and the city connects all the provinces in the region. Ho Chi Minh City is also an international gateway of the Southern area. The land area of Ho Chi Minh City is 2,095,239 km² which contents 32% of agricultural land (686,920 km²). As the biggest city in Vietnam, its population reached 7.521 million in 2011 (GSO 2013). Ho Chi Minh City is also the biggest economic region and the biggest consumption market. Thus, the safe vegetable suppliers in Ho Chi Minh City

cannot satisfy the demand although the area of safe vegetable production in the city has been expanded.

Particularly in agriculture, due to the economy, politics and social conditions, Ho Chi Minh City is considered to be the industried and service city. Thus, the farm land has been narrowed that affects the total value of agricultural production. According to The Agri-Business Incubator, the vegetable cultivation area was 13,515 ha, increased only 4% compared to 2010 (safe vegetables is 13,245 ha, increased 4%), the estimated yield will be 299,000 ton (ABI 2013).

In addition, the difference in population between rural areas and urban areas makes the safe vegetable demand in Ho Chi Minh City very high. Thus, the urban people who have the higher income, the higher education level, and the greater awareness of organic food are willing to pay more.

Another reason to create a demand for the organic food is because of the uncontrolled quality of vegetables in China. There are a thousand poisoning cases in Ho Chi Minh City. However, the imported vegetables from China are growing rapidly. In addition, the famers in Ho Chi Minh City are also using the illegal chemicals which are produced in China (Dantri 2013). Therefore, the customers do not know where to buy the safe vegetables and they are willing to pay more if the products have a clear origin (Tuoitre 2013).

6.3.2 Market segmentations and target customers

Every business has its own target customers and market segmentations because there is no business which can satisfy all the customers. In this part, the APO Organic Farm introduces its market segmentations and target customers together with the reason of choosing them.

The APO Organic Farm will focus on 2 market segmentations which are described in the table below.

TABLE 7. Market segmentation.

Target Segments	Purchasing	Characteristics	Channels
	motivation		
High rank	Desire to create a	-high rank	-direct sale and
Restaurant / Hotel	good quality of	restaurant in Ho	marketing.
	food for top-notch	Chi Minh City.	
	restaurants from a high organic food	-pay attention to	
	supply.	food safety and	
	Suppry.	environment	
	Looking for a		
	sustainable organic		
	food supplier.		
	Want to use high quality, safe food for daily using		
High Income		-top income	-online sale and
Families		family	social media
		-care about quality more	marketing
		than price	

In these segmentations, the most important segment is the high ranking restaurants and hotels. Because they are the top in this field, they can purchase a large amount of vegetables for daily use. They will always choose the best quality supplies for their restaurants. The next segmentation is the high income families who are less focused on. This group of customers has the top income in the society and they are willing to buy a good quality of food without concerning the price. They expect the guarantee from the producers and always choose best brands in the market. To reach them, the APO Organic Farm will create a web page which allows customers to purchase the product online. The web page and the other social media channels will be the main marketing tools for the farm. The visiting farm tours are also worth to put in consideration.

6.3.3 Competitive edges

The organic vegetables of the APO Farm are absolutely safe for health and produced by the "Five No's" organic process:

- No herbicides
- No chemical fertilizer residues
- No plant pesticide residues
- No growth stimulants
- No GMOs (Genetically modified organism)

All APO's products are ensured to reject of four toxic elements that make vegetables contaminated:

- The residues of nitrate (found in chemical fertilizers)
- The content of pathogenic microorganisms (from pollution water, etc.)
- The chemical residues (from pesticides, herbicides, growth stimulants)
- The residues of heavy metals (arsenic, lead, mercury, cadmium, etc.)

The APO's organic vegetables can be preserved in the longer time due to the using of clean water for irrigation. Therefore, all products will have no chemical contamination.

The organic vegetables of APO will be packed in clean and sealed nylon bags, which is stamped with an APO exclusive label. This can ensure that they are 100% genuine products.

The APO vegetables only need to be washed briefly. Then, they are ready to use. It is really saving the time for consumers in this busy life.

Using the organic products which are produced by the aquaponics technology will help protect the environment because the aquaponics model does not either pollute the soil or the water. In addition, this method protects insects in nature.

6.3.4 Competitors

Currently, in Vietnam, the PGS is the only system that certifies organic products for the domestic market. In 2004, the IFOAM accepted the PGS as a system that ensures value for organic products, especially for the local market. However, the PGS headquarters are located in Hanoi. Therefore, most of their members are companies that produce organic food in the Hanoi region. There are about 5 companies specializing in organic food products that provide for the whole northern region. They are Nong San Ngon, VinaGap, Ecomart, Thanh Xuan Organic vegies, Tam Dat JSC. Those companies have their branches in some other provinces outside Hanoi. However, the delivery will reduce the quality of fresh food before reaching end users. For the companies that provide organic foods to Ho Chi Minh City and other Southern provinces, getting the certificate from PGS is a very difficult part. Thus, compared to the Hanoi market, it is hard for the organic food companies in the Southern Vietnam to create trust and reputation to customers. (PGS 2013.)

The direct competitors are the companies, the farms, and the cooperatives that produce 100% organic food and vegetables.

Currently, The Organik Da Lat JVC is the only brand in producing organic vegetables for Southern region.

- Their website: http://www.organikvn.com/index.html
- The Organik Da Lat started production in 2006. They have a total 20 ha of land therein 6 ha is for production of organic vegetables (105 kinds of vegetables).
- Clients: the 5-star hotels, the Vietnam Airline Food Processing, 100 foreign families who are working in Vietnam.
- They have a modern production and full package of facilities, including greenhouses, waste treatment system. In addition, they are also using the clean water to irrigate the crops and the organic compost for the production.
- They keep records carefully of each crop's history in order to guarantee their customers that what they buy is not contaminated. (Bao 2012)

The indirect competitors are divided into 2 groups. The first group is the companies, the farms, and the cooperatives that provide safe vegetables under the standards of VietGap.

In 28/1/2008, VietGap Standards was officially approved by the Ministry of Agriculture and Rural Development. VietGap (stand for Vietnamese Good Agricultural Practices) is based on 4 criteria:

- The standardization of technology production
- The food safety, including measurement to ensure that the products contain no chemical contamination or physical contamination.
- The working environment is aimed to prevent the abuse of labor force
- The product traceability. This criterion allows to identify the problem from production to consumption.

Until now, there are hundreds of organizations, units and individuals have been certified the VietGap Standards. They are participating in the trade service of agricultural products and exporting their products to foreign markets. (VietGap 2013.)

In Southern region, there are farms, home gardens in Lam Dong provinces, such as the Anh Dao Cooperative, the Da Lat Gap, the SaveFood Ltd, and the Organik Da Lat JVC.

Currently, the Anh Dao Cooperavtive has 137 ha of vegetables. Their yield is around 12 tons/year. They deliver to nationwide markets through Metro, CoopMart, and Maximart systems. The brand of Anh Dao's products is "Da Lat Vegetables". (Bao 2012.)

The Da Lat Gap is one of the first businesses who has a GlobalGap certificate in Vietnam. The GlobalGap certify the safe vegetables under the international standards. Moreover, the Da Lat Gap's products have been welcomed in foreign markets. From 1.5 ha at the beginning, they expanded to 5.4 ha, reaching the yield 400-500 tons/year. All of their vegetables are produced in the greenhouses under

the guidance of experts. Every year, the Da Lat Gap has exported 80% of their products. (Dalat Gap 2013.)

The SaveFood Ltd is formerly a cooperative that provides vegetables for wholesale markets in Ho Chi Minh City. The SaveFood Ltd found that, the market demand is increasing rapidly. Thus, they focus on Binh Chanh and Da Lat as their production warehouse and delivery the product to the end customers from those places. Their operating fields are Food Retail, beverages, vegetables, beans, fruit trees, fruits and vegetable processing and preservation, restaurant services, chef trainings, etc. The website: http://www.savefood.vn/Gioi-thieu/CONG-TY.aspx

The Organik Da Lat JVC is both the direct and indirect competitor of APO Farm. Every month, this company provides around 20 tons of vegetables under the VietGap Standards. This company exports also around 1 ton to Germany, of which 15% vegetables and 85% processed vegetable products. (Nhat Hung, H.Dang 2007)

The second group is the companies who provide the normal vegetables or the "fake" safe vegetables.

6.4 Marketing plan

In the marketing strategy, the pattern of the marketing mix (4 P's) will be applied to give a basic strategy for the business. Each factors of the marketing mix, such as the product, the price, the place, and the promotion will be discussed specifically below.

Product

Categories

The APO Organic Farm offers organic vegetables and fishes for the market in Ho Chi Minh City.

Variety

As mentioned above in chapter 4, there are many types of plants and fishes which can be grown in the aquaponic system. Nevertheless, the APO Organic Farm will choose the group fruit trees and the group tuber crops only for planting and the group tilapia only for raising at the beginning of the process. The reason is that, it is difficult to grow those plants and raise those fishes on normal farms in Ho Chi Minh City, but they can be grown easily and very well in the aquaponic system. Moreover, they are more valuable than the other crops such as salad, beans, peanut, etc. Therefore, if the APO Farm can grow and sell these types of crops, the company will have a competitive advantage in the vegetable market. Moreover, microgreens can be also grown in the aquaponic system together with other crops. Then, the variety of crops is also one of the competitive advantages of the APO Organic Farm. Depending on the demand of the market, in the next stage, the amounts and types of crops will be chosen to be produced in the farm.

Quality

The products of the APO Organic Farm have the premium quality compared to other farms in Ho Chi Minh City. The seeds of vegetables are chosen carefully to create the premium quality and 100% natural food. During the growing process, the crops are always provided with natural minerals to increase the quality of the products. There are no chemical fertilizers in the production process. Therefore, the APO Organic Farm produces 100% organic food for the market.

Packaging

The packaging is one of the important features to make products distinctive from the others. Thus, the APO Farm pays a lot of attention to the packaging. Every product will be sealed in a nylon bag which is stamped a logo and some information of the company. The color of the bags is green to create an environment-friendly feeling. The package must mention that the product is produced by the aquaponics system and they are 100% organic. To add more value to the product, the preservation instruction is needed as well. Then, the customers can know how to keep them well while using.

Brand name

In each product, the brand label is attached to create an image of the company. The "APO" is a short form which is combined from two words Aquaculture and Ponos. Aquaculture is a system which grows fish in a re-circulating system and Ponos is the Greek word for growing plants with or without media. The most importance is the label of 100% Organic which means there is no other chemical used in the producing process.

Price

The prices in the market widely vary depending on types of crop, fish and the demand of the market. Therefore, it is difficult to set a specific price for each organic product of the APO Organic Farm. The pricing strategy should bring advantages and attract more customers to the farm. After researched the market price, there are 3 types of products which are sold in the different pricing groups, such as normal vegetables, safe vegetables, and organic vegetables. The table below will give a short overview on the general market prices of the vegetable products in the Ho Chi Minh City market.

TABLE 8. Market price of vegetables in Ho Chi Minh City.

Currency	Normal Vegetables	Safe Vegetables	Organic Vegetables
1000 VND	(70% of the market)	(20% of the market)	(10% of the market)
Price	15 to 80	18 to 96	30 to 160

The price for vegetables is normally from 15000 VND to 80000 VND depending on types of crops. They are normally sold in local markets but do not have a clear origin. Those kinds of vegetables can be provided by farmers, cooperative or even imported from China. The second group is safe vegetables which are produced under the VietGap standards, so they are more 20% expensive. The organic vegetables are now sold to only restaurants and some foreign families in Ho Chi Minh City by the Organik Da Lat Company with 100% higher price than the normal kinds. To gain customers in the market, the price of APO Organic Farm

should not be higher than Organik Da Lat. The price must be at the same level or could be higher at 10% but other values should be added more to create the competitive advantages, such as: free and fast transport, the freshness of vegetables, and the high quality organic products. Thus, the price of organic vegetables will be around 33000 VND to 176000 VND. The production of fishes is not important because they are only used for producing fertilizers and complete the cycle. They are normally harvested after 1 year. Therefore, the strategy price for fish product is not determined yet in this thesis.

Place

For transferring the organic products to the target customers, the process of distribution is quite simple because all products are directly delivered to the customers from the farm. There are no intermediate distributors such as retailers or wholesalers in between. Thus, the customers will get a good price when purchasing the products directly from the farm. The Figure below will illustrate the transportation process of the APO's products to the customers.

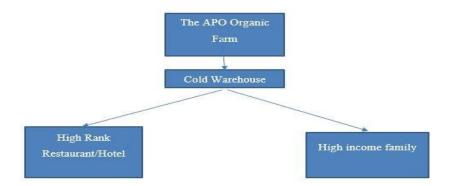


FIGURE 22. The distribution channel.

After harvesting the organic vegetables and fishes, they will be transferred to a refridgerated warehouse and wait to be delivered to customers. The warehouse is also located next to the farm. When receiving the orders from the customers, the products will be delivered to the customers directly by trucks from the warehouse. The customers will receive the organic foods in 2 hours at the latest. This transportation process will ensure that all products are always fresh when they reach the customers.

Promotion

The table below explains the marketing communication channels for each group along with the purposes and tools to apply in the actual business.

TABLE 9. The communication types of marketing.

Communication type	Target group	Goals	Tools
Advertising	- High ranking restaurants/hotels - High income families	- Introducing about organic products and the farm. - Raising the awareness and interest for customers to buy high quality food.	- Advertising on the own website - Using social media such as facebook, youtube, forum, etc Sending emails, brochures to customers, or doing direct marketing through meetings.
Personal Selling	- High ranking restaurants/hotels	- Finding potential customers Having more information from the market and receiving feedbacks from customers.	- Emails, telephone, meetings, video conferences Making presentation about the products and the production of organic food by applying aquaponics model
Sales Promotion	- Restaurants /hotels - High income families	- Increasing short-term sales or gaining more market shares - Developing the customer relationship	- Giving discount in large purchases - Season sales - When launching new products for customers to try
Public Relations	- Interested groups - Media & supporters - Investors	- Building brand - Enhancing the flow of information between public and the farm	- Media, newspapers, etc. - Internet news, television, emails, social media, etc. - Visiting farm tour

The APO Organic Farm only focuses on two certain target customers which are the high ranking restaurants/ hotels and the high income families. In the advertising communication types, the direct marketing should be applied such as emails, telephones, face-to-face conversations. The social media channel is one of the important tools to provide more information of the farm and the products to the customers. With the direct marketing approach, the customers are taken care and are guided to make the decisions on further steps of purchasing products. For the high income families, they could buy products directly from website after receiving all information from the direct marketing channels. It could save more labor cost than building the entire retail stores to reach these target groups.

Personal selling is more costly and it only focuses on the high ranking restaurants/hotels because they are the main target customer. This group will bring the most profitability to the farm by purchasing a high volume of the organic products. Thus, this target group will be contacted by farm's representatives in order to help them make the final decisions. Meetings, emails, telephone sales are applied as well.

To maintain and develop the relationship of existing customers and to seek for new customers in the market, the sale promotion is always the best way to apply. The APO Organic Farm may give free delivery in the first 3 months during start-up time and give free samples of products to customers for tasting and enjoying the organic products. By purchasing a large volume of products, the customers will always get discount price from 5% to 10%. In addition, the season sales will be more interesting for customers.

In order to create a sustainable business brand, the public relation is always an important part of the marketing strategy. Public media will be used to raise the awareness of organic food's benefit. It will not only increase the demand in the market but also strengthen the brand name of the farm. Conducting visiting tours for the public representatives and the potential investors is a good one.

6.5 The financial considerations

In the financial strategy, the start-up cost will be analyzed in order to estimate the needed capital for the business plan. Finally, the financial strategy will come up with the profit and loss analysis to see how much money the plan can gain from the market.

The start-up cost

In this part, all the expenses will be listed out in the table below to calculate the total cost when starting up the farm. However, all the figures are estimated based on the current market in Ho Chi Minh City. The cost can be saved by using local products and labors.

TABLE 10. The start-up expense.

Start-up Expense	e	
1 unit = 1 million VND		
Land – 300m ²	300	
Green House – 300m ²	60	
Aquaponic System	60	
Office	50	
Storage	50	
Office Equipment and Supplies	10	
Legal Expense	5	
Total	535	

As described in the table, the total start-up cost is around 535 million VND and it is almost equal to the investment of the owners. It is considered cheaper than establishing an aquaponic system in other foreign countries. However, to reduce the cost, the land could be rented and the office could be built later when profits arrive. The storage should be built in the beginning to store crop seeds and then

store the products after harvesting. These costs are only for the start-up and they do not include any cost for running the farm. Thus, to run the APO Organic Farm, the operation expenses should be calculated, such as the salaries, the purchasing crops/fishes costs, the utilities expenses, the advertising expenses, the marketing expense, etc. All these cost are presented in the table below

TABLE 11. Operation Cost.

1	Operation Cost unit = 1 million VND	
	Month	Year
Salary	25	300
Utilities	20	240
Crops/Fishes	3	36
Total	48	576

The aquaponic system helps reduce the workforce in the farm. The daily job requires only 1 person at the farm, so the required workers in the farm are only two persons. Two persons are enough to handle quite much works from the office to the farm easily. However, during harvesting periods, which are 4 times in a year, the demand for labor will rise because the packaging and delivering tasks cannot be done by only 2 persons. With the 300m² farm, 3 more persons are needed to do the harvesting, packaging and delivering the products to customers. So the average salary every month is calculated by summarizing the total salaries of all workers in a year then divided by 12. In total, the cost for running the farm is 576 million VND in the first year without advertising cost and others.

Required Capital

As mentioned in the business information, the founders are willing to invest 600 million VND to the business. However, this amount of money is just enough to cover the start-up costs. Thus, to run the farm, the external investment are required. Because of the characteristics of the farming business, there is no product to sell in the first three months. Therefore, there must be more money to cover all the operation's expenses. Based on the startup cost and operation cost, the required capital should cover the first 3 months expense which is 144 million

VND. To cover that money, the founders decided to borrow 200 million VND from the bank with 9% annual interest rate to implement the business.

TABLE 12. The capital structure.

Capital Structure	
Owner Investment	600 million VND
Loan from Bank	200 million VND

Business profitability

With the 300 square meter area, the vegetable products could vary from 27600 to 46000 head of lettuce per year (Pade 2013). The price of lettuce may be around 20000 VND per unit. Thus, the profitability of producing lettuces in one year is from 552 million to 920 million VND which are maybe enough to cover the operation monthly expense. However, The APO Organic Farm should grow more various types of crops in order to get the best profitable. Other costs such as advertising is not calculated as well as the profitability gained from the fish production. Thus, the profit and loss account just gives only basic information about the business.

TABLE 13. Profit and loss account.

PROFIT AND LOSS ACOUNT 1.1.2014 TO 31.12.2014		
1 Unit = 1 million VND		
Estimated Sale Revenue	736	
(VAT 10%)	73.6	
Net Turnover	662.4	
(Variable Cost)	36	
Gross Margin	626.4	
(Fixed Cost)	540	
Operating Profit	86.4	
(Bank Ioan, 9%/year)	18	
Profit or Loss of the year	68.4	

As seen from the profit and loss account table, the estimated sale revenue is the average yield of lettuces per year multiplied with the current price of an unit. After the first year, the APO Organic Farm may get profits but the loans have still not been paid. Hence, all the loans and investments should be returned in the next few years of the business. However, the organic farm is likely to get profits and it is definitely a potential business.

6.6 Risks Assessment

While implementing the business idea, risk assessment has to be analyzed in order to prepare the reaction of the business. Generally, the authors only focus on 3 groups of risks. Technology, market and reliability risks will be discussed in sections below.

Technology Risks:

Power cuts

Fishes require clean water and dissolved oxygen to live and grow up. Their lifetime depends on its size, the water's temperature, the amount of ammonia and oxygen levels. Hence, a power supply system is very necessary in aquaponics model. A generator, battery backup or solar/wind power may be used for aquaponics system as well. The important thing for the owners is to have such a backup power supply system in case of prolonged power cut.

Water cuts

The fish tank of an aquaponic system needs to be refilled once a week in summer. The water sources may be from the bore, scheme or rain water. However, refilling water must be done by the farmers because all aquaponic systems are built in the Greenhouse. In the area that the Greenhouse is located, water can also be cut off abruptly. So, to avoid this risk, water storage is required.

Fish Sicknesses and Diseases

It's necessary to monitor the fish's behavior carefully every day. If there is one sick fish in the tank, it should be removed from the system immediately.

Market Risks:

Product & Price

At the beginning period, target customer is only the high-ranking restaurants, the 5-star hotels and 200 foreign households in Ho Chi Minh City. However, in the second step of expanding farm scale and segmentation, consumers can deny to buy organic vegetables because of their low awareness and they cannot differentiate normal vegetables from organic vegetables. Even they want to protect their health; they might choose safe vegetables instead of organic vegetables. There is no study to show how much better organic vegetables provide more nutrients than safe vegetables, but very clearly, the price of safe vegetables is cheaper.

Yield

If famers apply many kinds of crop at the starting period, they may not be able to manage the yield well. At the starting period, the yield may not meet the needs of target customers if their need is much more than the maximum yield that the current farm scale can provide.

Reliability Risk

Safe vegetables can be certified by VietGap or GlobalGap whose branches locates in many provinces. But in Vietnam, there is only one organization that tests and certifies the organic food, and it is located in Hanoi. That is the PGS system which is mentioned in the above chapter. When customers come to APO Farm, they may require a certification that these vegetables are really organic vegetables and good for health. In addition, aquaponics is a very new technology. Hence, there is no organization, farm, cooperative, and company in Vietnam have been applying. The risk of failure can come from the resistance of customers.

7 FINDINGS AND CONCLUSIONS

In this chapter, the entire research questions will be answered according to the analyzed data and findings. The decision is also made to decide whether the business plan should be implemented or not. At the end, the authors will recommend for the future researches to improve and complete the business plan.

7.1 Findings

Table below shows the research questions and the answers by all the findings which have been made so far.

TABLE 14. The research questions and findings.

Research Questions	Findings
-What is the current situation of organic	- Low awareness in community about the
food in Vietnam, especially in Ho Chi	importance of organic food
Minh City?	- The household's income is increasing
	rapidly
	- a few suppliers in the market
-Is there any demand for organic food in	-There is a huge demand of organic food
Vietnam market, especially in Ho Chi	in Ho chi minh City because of lacking of
Minh City?	suppliers
-Who are the target customers of the APO farm in Ho chi minh City?	-There are 2 main target customers. The most important group is the high rank restaurants/hotels and the second one is high income families in Ho Chi Minh city
-How the marketing will be performed to	-Direct marketing, personal selling are
reach the target customers?	suitable to reach the target customers
	effectively; season promotion together
	with free products for customers; public
	relation through social media, vising
	tours, websites and printed medias

-How much financial funding is required	- Around 600 million VND
for the starting-up?	
-How much profit can gain in 1 month for	- Around 68 million VND.
this business idea?	

The first research question was answered mostly in chapter 4 and in a part of the market situation in chapter 6. After studied the market, the authors recognized that the organic market in Ho Chi Minh has a potential but it is also risky to invest in. The reason is the income of the households in Ho Chi Minh City is increasing rapidly and there are many supports from the Government for agriculture projects. In addition, there are few suppliers in the market already but they produce not so many products. Most of the products are only sold to the restaurants and the foreign families who have awareness of organic food. Beside all the opportunities, the market is risky because there is no awareness of organic term in community. However, the authors still believe the organic farming model very potential to invest.

The authors have been studied the most essential external issues in the market: the product demand, the target customers, and the competitors. Currently, there are so many low quality foods which are sold in the market that can poison and harm the human health. Therefore, the trust of customers is decreasing and they are looking for reliable suppliers that can provide a better quality food in the market.

With the existing demand in the market, the authors started to find out which group of customers should be targeted. That is also the research question number three. Because the organic products are more expensive than normal products, the target customers was aimed to be high income groups who care for the quality of food. After studied, the target groups are narrowed into 2 segments: the high-rank restaurants/hotels and the high income families.

The fourth question requires a basic marketing plan for the business. To advertise the products to two target customer groups, the internet is the most vital marketing tool for reaching them. Websites and social Medias need to be built and linked together to create a strong image of the business when reaching the customers.

The purpose is to provide information of the products and the advantages of using them. Customers could purchase directly from websites as well. However, for the high-rank restaurants/hotels, it seems the advertising through website and social media are not enough. Personal selling is also required to guide and assist customers in the purchasing process and after purchased products.

The fifth question is how much capital needed to implement the plan. By searching, the authors found that, to run 300 m² organic farm in Ho Chi Minh in 6 months without profit, the capital requires at least 800 million VND to implement. One part of the capital is the owner's investment and the rest is a loan which borrowed from the government bank with 9% interest rate.

The final question is how much profit can gain back from this business? It is so difficult to calculate the profit when the business can produce a variety of products. With the aquaponic system, the APO organic farm can produce any type of vegetables in the market. Therefore, the price of each product is variable. To simplify the process, the authors just looked at only the capability of producing lettuces, the common vegetables in the market, to calculate the profit. By the way, fishes are not considered in this calculation as well. Finally, the annual profit is approximately 68 million VND per month. It is considered as a low profit but the profit could be raised by planting rationally crops in the aquaponics system.

7.2 Final Decisions

With all the findings which had been made, the final answer is "Yes". It is an attractive and potential business plan to invest. The reasons are:

- High demand in the market
- A few competitors
- Strong competitive edges (with same price but provide better quality)
- Application of the modern and advance technology
- Sustainable business model
- Profitable enough to return all investments in short time.

With all confidences, the authors suggest the business plan should be continued. The thesis just provides a strong business idea and basic business plan. The plan is missing some parts such as human resources, transports, production, etc. However, the thesis fulfills all the information needed to convince that it is a worthy business plan.

7.3 Proposal for future researches

While conducting this bachelor's thesis, the authors found a large quantity of information related to the practice of starting a business in Vietnam as well as the process of creating a business plan. In this thesis, the research and information are only at a basic level to create a basic business plan. Thus, there are more important aspects to study and discover in order to complete a detailed business plan such as:

- Government Support: in this thesis, there is no research on the Vietnamese government's supports. The supports exist but the process is not researched. Therefore, to gain more benefit to the business, further research is necessary to find out what are the government supports for agriculture projects in Vietnam.
- Market research: In order to understand the customer's behavior and create a good marketing plan, market research should be done before establishing the business. With the market research information, the target customers could be more specified together with the market size and the growth.
- Marketing plan and financial plan: they should be done more deeply and specifically. In this study, the marketing plan focuses on the 4'Ps only. The financial plan also focuses on how much financial funding should be prepared for the start-up stage and the expected profits for the first year. The balance sheet, cash flow, profit and loss tables, and financial ratios are not created in this thesis. Thus, all of them should be analyzed and forecasted in order to give a comprehensive look to the whole project.
- Others: product plan, distribution plan, and human resources plan are also important and it is necessary to include these in the next research.

8 SUMMARY

Consumers have the right to require a safe, nutritious food supply because bad food can cause a risk of cancer or cardiovascular diseases.

Although there are still many different opinions, more organic food are producing every day. They can be organic poultry, organic fruits, organic vegetables or organic drinks. That means, someday, organic food will play an important role in human diet. APO will be the leader in using the new aquaponics technology to provide 100% organic products, especially vegetables and fishes.

There are many advantages when applying the aquaponics technology in producing organic vegetables, such as:

- * There is no, even a little pesticide or other chemicals.
- * Protecting the environment and community health.
- * Easy traceability.
- * Helping reducing erosion because it stops ploughing the soil.

But we also have a number of constraints, such as:

- * Price is much more expensive than regular vegetables.
- * Food looks less attractive, smaller than the normal types, especially vegetables or fruits.
- * The number of harvesting time is less than traditional cultivation and needs more sophisticated care.

The objective of this thesis is to establish a viable plan for the vegetable business by exploiting the benefits of a new farming technique in producing premium organic vegetables.

Firstly, in the second chapter and the third chapter, the authors analyze the process of starting a business in Vietnam market.

In the fourth chapter, the current situation of vegetable market was researched, also gives the readers an overview of new terms such as safe vegetables, organic vegetables.

In the next chapter, some basic knowledge about technologies in organic farming and aquaponics system were introduced.

Chapter six is the empirical part: Case study of the organic farming in Ho Chi Minh City. This chapter starts with the description of the APO Company and then the authors create a marketing and financial plan in order to optimize the opportunity and avoid risks.

The two final chapters are Conclusion and Summary in which the authors give a brief of all findings in the process of writing the business plan as well as make the decision on implementing the idea. Based on this plan, the authors propose the direction of the next research and then finalize the content of the thesis in the Summary part.

References

Published references

Abbas Tashakkori, Charles Teddlie. 2002. *Handbook of Mixed Methods in Social and Behavioral Reseach*. Sage.

Alexander Osterwalder, Yves Pigneur. 2010. *Business Model Generation*. John Wiley & Sons.INC, Hoboken, New Jersey.

GOPFP. 2011-2012. *Result of Objective program performance*. General Office for Population Family Planning.

Harvard Business School Publishing Corporation. 2010. *Harvard Business Review on Business Model Innovation*. United States of America.

Hisrich, R. 1992. *The need for marketing in entrepreneurship*. Journal of Consumer Marketing.

Hoffren, S. 2002. *Preparing a Business Plan for a Start-up Company*. 2nd edition. Helsinki: Oy Ebita Ab.

Hopkin. 2002. Holistic Risk Management in Practice. London: Witherby.

IFOAM, T. 2003. Co-existence between GM and non-GM crops - Necessary anticontamination and liability measures.

Kart P.Sauvant and Anh Nga Nguyen Tran. 2002. *How to Prepare Your Business Plan.* NewYork and Geneva: in Switzerland.

Kotler, P. 2003. *Marketing Insights From A to Z*. United State of America: John Wiley & Sons, Inc.

McKinzey. (1998). Starting up: Achieving success with professional business planning. Netherland.

Philip Kotler. 1999. *Principles of Marketing*. 2nd edition. Prentice Hall Inc.

Pinson, L. 2003. Anatomy of a Business Plan. 5th edition.

Saunders M, Lewis P, Thornhill A. 2009. *Research Methods for Busines Student*. 5th edition. Pearson Education Ltd.

Steven D.Peterson, Peter E.Jaret and Barbara Findlay Schenck. 2010. *Business Plans Kit for Dummies*. 3rd edition.

Thuy, N. M. 2005. Human Nutrition. Can Tho: Can Tho University.

West Alen. 1995. Business Handbook: A Business Plan. Great Bristain.

Yin. 2003. *Case Study Research: designs and mehtods*. Third edition. Thousand Oaks (California): Sage.

Zimmerer. 2005. Essentials of entrepreneurship and small business management. 4^{th} edition. New Jersey: Pearson Education Ltd.

Electronic references

Agri-Business Incubator. 2013. Haettu 1. September 2013. [referenced 1.August 2008] Available at: www. [referenced 1.August 2013] Available at:abi.com.vn: http://abi.com.vn/hoi-nghi-tong-ket-nganh-nong-nghiep-va-phat-trien-nong-thon-thanh-pho-ho-chi-minh-nam-2011-va-trien-khai-ke-hoach-nam-2012-2/

Viet Trade Agency. 2011. [referenced 1.August 2013] Available at: http://www.vietrade.gov.vn/en/index.php?option=com_content&view=article&id =1008:overview-of-ho-chi-minh-city-part-2&catid=283:overview-of-provinces-cities&Itemid=261

Viet Trade Agency. 2011. [referenced 1.August 2013] Available at: http://www.vietrade.gov.vn/en/index.php?option=com_content&view=article&id =998:ho-chi-minh-city&catid=283:overview-of-provinces-cities&Itemid=261

Viet Trade Agency. 2011. [referenced 1.August 2013] Available at: http://www.vietrade.gov.vn/en/index.php?option=com_content&view=article&id=1007:overview-of-ho-chi-minh-city-part-1&catid=283:overview-of-provinces-cities&Itemid=261

Agropreneur, T. Y. 29. September 2011. Hydroponics, Aquaponics and Aeroponics. [referenced 1.August 2013] Available at: http://youngagropreneur.wordpress.com/2011/09/29/hydroponics-aquaponics-and-aeroponics/

Agroviet. 18. 7 2013. Market News. Trade Promotion - Agricutural and Rural Development Department - enews. [referenced 1.August 2013] Available at: http://xttm.mard.gov.vn/Site/vi-vn/73/81/198/74463/Default.aspx

Anh, H. 14. 7 2012. VTC News. [referenced 1.August 2013] Available at: http://vtc.vn/649-340466/suc-khoe/an-toan-thuc-pham/rau-sach-khong-phai-la-rau-an-toan.htm

Aquaponics, V. N. 2011. Việt Nam Aquaponics. [referenced 1.August 2013] Available at: http://vnaquaponics.wordpress.com/author/aquanetviet/page/4/

Bao, M. V. 2012. Agro Info. [referenced 1.August 2013] Available at: http://agro.gov.vn/news/tID22867_Mot-so-van-de-ve-nganh-rau-an-toan-tai-Da-Lat.htm

Baomoi. 3 April 2012. [referenced 1.August 2013] Available at: http://www.baomoi.com/Rau-sach-chat-vat-tiep-can-thi-truong/45/8195298.epi

Berry, T. 20 September 2011. How to estimate Start-up Cost. [referenced 1.August 2013] Available at: http://www.entrepreneur.com/article/220342

Burney, M. 6. 3 2008. Inductive and Deductive Research Approach. University of Karachi. [referenced 1.August 2013] Available at:

http://www.drburney.net/INDUCTIVE%20&%20DEDUCTIVE%20RESEARCH

Cam Tieu Dung, N. 28. 4 2013. Phu Nu Online. [referenced 1.August 2013] Available at: http://phunuonline.com.vn/tieu-dung/tin-tuc/rau-huu-co-that-gia-lan-lon/a91750.html

Dantri. 9. July 2013. [referenced 1.August 2013] Available at: http://dantri.com.vn/suc-khoe/phat-hien-them-nhieu-mau-rau-nhiem-hoa-chat-doc-hai-752303.htm

Development, A. a. Organic Farming. EU. [referenced 1.August 2013] Available at: http://ec.europa.eu/agriculture/organic/organic-farming/what-organic_en

Dictionary, O. 2013. [referenced 11.August 2013] Available at:http://oxforddictionaries.com/definition/english/organic

Doanh, T. B. 2012. Buoc di lui cua thuong hieu rau sach. [referenced 11.August 2013] Available at: http://thebox.vn/Kiem/Buoc-di-lui-cua-thuong-hieu-rau-sach/19599.html

Ecovietnam. 2013. [referenced 11.August 2013] Available at: http://www.ecovietnam.org/teams/ecovietnam_teams.html

FMI. [referenced 11.August 2013] Available at: http://www.fda.gov/ohrms/dockets/dockets/06p0094/06p-0094-cp00001-05-Tab-04-Food-Marketing-Institute-vol1.pdf

FMI. 2005. Natural and Organic Foods. [referenced 11.August 2013] Available at:http://www.fda.gov/ohrms/dockets/dockets/06p0094/06p-0094-cp00001-05-Tab-04-Food-Marketing-Institute-vol1.pdf

Gap, D. 2013. [referenced 15.August 2013] Available at: http://www.dalatgap.com/vietnamese/index.php

GSO. August 2013. General Statistics Office. [referenced 15.August 2013] Available at:

http://www.gso.gov.vn/default.aspx?tabid=387&idmid=3&ItemID=12875

Hong, T. 11. 5 2013. Society. Sai Gon Giai Phong Online. [referenced 15.August 2013] Available at: http://www.sggp.org.vn/xahoi/2013/5/318170/

Lennard, W. 2013. aquaponic solution. [referenced 15.August 2013] Available at: http://www.aquaponic.com.au/aquaponics.htm

Meclabs. 28. September 2012. Marketing Competition 101: The 3 Types of Competitors to keep an eye on. [referenced 15.August 2013] Available at: http://sherpablog.marketingsherpa.com/marketing/competition-types-to-watch/

Ministry of planning and investment agency for enterprises development. 2013. [referenced 15.August 2013] Available at:

http://www.business.gov.vn/tabid/235/catid/629/item/10907/chon-loai-hinh-kinh-doanh-va-dang-ky-kinh-doanh.aspx

Newspapers, B. V. 2012. Business. [referenced 15.August 2013] Available at: http://www.sggp.org.vn/xahoi/2013/5/318170/

Nhat Hung, H.Dang. 2007. Vietbao online. [referenced 15.August 2013] Available at:: http://vietbao.vn/Kinh-te/Da-Lat-moi-thang-20-tan-rau-theo-tieu-chuan-GAP/40212251/87/

Niehoff, K. 24. 9 2012. Oak Hill Farm. [referenced 15.August 2013] Available at: http://www.oakhillfarm.net/2012/09/24/the-nutrition-science-edition-cruciferous-Vegetables-part-1

OECD. 2013. STRUCTURAL POLICY - COUNTRY NOTES of Vietnam.

[referenced 15.August 2013] Available at:

http://www.oecd.org/countries/vietnam/Viet%20Nam.pdf

OrganikDalat. 2013. [referenced 15.August 2013] Available at:

http://www.organikvn.com/contents/en-ca/d195.html

Organisation, H. T. 1998. What is Organic Farming? [referenced 15.August 2013]

Available at: http://www.infonet-biovision.org/res/res/files/488.OrgFarm.pdf

Pade, N. 2013. Aquaponics. [referenced 15.August 2013] Available at:

http://aquaponics.com/page/home-and-school-systems

Peruzzi, N. 2010. Customer Segmentation - An Overview. Research Access.

[referenced 25.August 2013] Available at:

http://researchaccess.com/2010/08/customer-segmentation-an-overview/

PGS. 2013. PGS Organic Certificate. [referenced 25.August 2013] Available at:

http://vietnamorganic.vn/chi-tiet-tin/168/Pgs-he%CC%A3-tho%CC%81ng-

chu%CC%81ng-nha%CC%A3n-tin-ca%CC%A3y-cho-sa%CC%89n-

pha% CC% 89m-hu% CC% 83u-co.html?lang=eng

Project, T. A. 2012. Tucson AquaPonics Project. [referenced 25.August 2013]

Available at: http://www.tucsonap.org/

Raymond. 4. February 2009. Step in Establishing a Business. [referenced

25.August 2013] Available

at:http://raymondgovinda.wordpress.com/?s=step+in+establishing+a+business

Reid, T. 1999. Organic Farming Definition and History. [referenced 25.August

2013] Available at: http://www.beginningfarmers.org/organic-farming-definition-

history/

Riley, J. 01. May 2009. What is Market Demand. [referenced 25.August 2013]

Available at: http://www.tutor2u.net/blog/index.php/business-

studies/comments/what-is-market-demand

Soil. Association. 2013. [referenced 25. August 2013] Available at:

http://www.soilassociation.org/whatisorganic

Soil.Association. 2013. Organic. [referenced 25.August 2013] Available at: http://www.soilassociation.org/whatisorganic/organicfarming

Sonongnghiep. 5. April 2013. [referenced 25.August 2013] Available at: http://www.sonongnghiep.hochiminhcity.gov.vn/chuyennganh/lists/posts/post.asp x?Source=/chuyennganh&Category=Rau+an+to%C3%A0n&ItemID=273&Mode =1

Thai, P. 2012. Goods - Materials. [referenced 25.August 2013] Available at: http://cafef.vn/nong-thuy-san/rau-an-toan-van-la-xa-xi-20120729115837729ca52.chn

Trung, N. T. 2013. Indoor_Ntt_Aquaponics. [referenced 25.August 2013] Available at: http://www.vn.to/~aquaponics/indoor_ntt_aquaponics.htm

Tuan, T. T. 2013. [referenced 25.August 2013] Available at: http://www.ecovietnam.org/teams/ecovietnam_teams.html

Tuan, T. T. 2013. [referenced 25.August 2013] Available at: http://aquanetviet.org/post/121543/nu-i-con-g-trong-h-th-ng-aquaponics

Tuan, T. T. 31. 3 2013. [referenced 25.August 2013] Available at: http://aquanetviet.org/post/121549/tr-ng-c-y-g-trong-h-th-ng-aquaponics

Tuan, T. T. 31. 3 2013. [referenced 25.August 2013] Available at: http://aquanetviet.org/post/121543/nu-i-con-g-trong-h-th-ng-aquaponics

Tuan, T. T. 2013. aquanetviet. [referenced 25.August 2013] Available at: http://aquanetviet.org/trieuthanhtuan.

Tuoitre. 9. June 2013. [referenced 25.August 2013] Available at: http://tuoitre.vn/kinh-te/552882/thuc-pham-sach-hut-khach.html

Uusyritykeskus. 2004. Establishing a Business. [referenced 25.August 2013] Available at: http://www.hameenuusyrityskeskus.fi/materiaalit/opas_english.pdf

Van, H. 28. August 2009. Dan Tri . [referenced 25.August 2013] Available at: http://dantri.com.vn/suc-khoe/du-luong-thuoc-bao-ve-thuc-vat-trong-rau-lai-sos-346762.htm

VanNhi. 14. December 2009. kinhtenongthon. [referenced 25.August 2013] Available at:

http://www.kinhtenongthon.com.vn/Story/VandeSukien/2009/12/21235.html

VietGap. 2013. [referenced 25.August 2013] Available at:

 $http://agro.gov.vn/news/tID22867_Mot-so-van-de-ve-nganh-rau-an-toan-tai-Da-Lat.htm$

VietTrade. 2011. Vietnam Trade Promotion Agency. [referenced 25.August 2013] Available at:

http://www.vietrade.gov.vn/en/index.php?option=com_content&view=article&id =1041:the-plant-for-developing-of-ho-chi-minh-citys-economy-part-1&catid=262:ho-chi-minh-city&Itemid=254

VietTrade. 2012. [referenced 25.August 2013] Available at:

http://www.vietrade.gov.vn/thc-phm-a-ung/2746-tieu-thu-thuc-pham-va-do-uong-tai-viet-nam-giai-doan-2010-2016-phan-1.html

VietTrade. 2012. Report: Export Fruit & Vegetables to EU market. Hanoi: [referenced 25.August 2013] Available at:

http://www.vietrade.gov.vn/images/stories/Bao_cao_nghien_cuu/Bao_cao_rau_qua_tuoi_EU.pdf

Village, G. E. 22. 12 2011. Govardhan Eco Village. [referenced 25.August 2013] Available at: http://www.ecovillage.org.in/ecopedia/organic-farming/crop-diversity-and-organic-farming-2