INTERNATIONALIZATION DECISION MAKING

Case: Finnish Waste Water Treatment Company to Vietnam

LAHTI UNIVERSITY OF APPLIED SCIENCES
Degree Programme in International Business
Thesis
Spring 2010
Do, Thi Thanh Ha

Lahti University of Applied Sciences
Degree Programme in International Business

DO, THI THANH HA:

Internationalization Decision Making
Case: Finnish Waste Water
Treatment Company to Vietnam

Bachelor's Thesis of Degree Program in International Business, 80 pages, 4 pages of appendices

Spring 2010

ABSTRACT

As the local waste water treatment market in Finland becomes more and more saturated, many companies head out to developing markets such as China, India or Vietnam. The biggest problem for their internationalization decision making is the serious lack of information about the target markets.

The goal of this thesis is to assist Case Company, a Finnish waste water treatment company in the decision to expand its business to Vietnam. In order to achieve this goal, information about the Case Company, its products, the target market, investment conditions in Vietnam and supporting tools from Finland are studied.

The method used in this thesis is qualitative, with an inductive approach. In the theoretical framework, data are collected mostly from published sources such as books, articles and theses. In the empirical part, data are collected from personal observations, company reports, Vietnamese government publications, journals and especially in-depth interviews with professionals in environmental business.

Vietnamese waste water treatment market information is emphasized in the empirical part. Names and contact information of prospective customers groups, competitors and potential partners are provided. In addition, the investment condition part offers the latest information on popular market entry modes and tax incentives for environmental businesses. The supporting tools part follows to inform Case Company about the possible financial resources given by the Finnish Ministry of Foreign Affairs through Finnpartnership program and Concessional Credits.

In conclusion, the author suggests a positive decision for the Case Company to go to Vietnam. Additionally, two options that target two main potential customer groups are proposed. The first option is to use Finnish Concessional Credits to target Vietnamese local government buyers. The second option is to find a local agent with established connections in Waste Water Treatment to sell Case Company's products. Further suggestions of how to utilize Finnpartnership's supports as well as coordinating effectively with a Vietnamese agent are also provided.

Keywords: Concessional Credits, Finnpartnership, internationalization, pulp and paper industry, Vietnam, waste water treatment.

CONTENTS

LIST OF FIGURES

LIST OF TABLES

GLOSSARY

BO	Branch Office
BOD	Biochemical Oxygen Demand
CDM	Clean Development Mechanism
CERs	Certified Emission Reduction
COD	Chemical Oxygen Demand
EPC	Engineering, Procurement & Construction
FDI	Foreign Direct Investment
GSO	General Statistics Office of Vietnam
IPO	Initial Public Offering
IPs	Industrial Parks
IZs	Industrial Zones
JSC	Joint Stock Company
MONRE	Ministry of Natural Resources and Environment
MFA	Ministry of Foreign Affairs
NI	No Information
PVG	Petro Vietnam Group
RO	Representative Office
SS	Suspended Solids
VAT	Value Added Tax
VEP	Vietnamese Environmental Police
VINAPACO	Vietnam National Pulp and Paper Corporation
VPPA	Vietnamese Pulp and Paper Association
WB	World Bank
WTT	Waste Water Treatment

1 INTRODUCTION

1.1 Background

In the recent visit to Vietnam of Finnish Prime Minister Matti Vanhanen, environmental cooperation between Vietnam and Finland was the main topic. However, there are still few projects in implementation between the two countries and clearly the number is very much below the real potential.

There have been many studies and theses made about environmental problems and the potential market in Vietnam. In many previous Master's theses by students of Lahti University of Applied Sciences, the same issues of investment conditions and market potentials have been addressed. However, it is essential to understand that the Vietnamese environmental equipment market and investment conditions are changing at a very fast pace. Thus, the author strives to find out the most relevant, up-to-date information within the research time frame.

In a practical training period in Finpro in summer 2009, the author had an invaluable chance to get access to the current cooperation topics between Finnish and Vietnamese enterprises. Through the author's own observation, there are more and more Finnish environmental companies participating in the internationalization process and choose Vietnam as an investment destination. One of the biggest obstacles faced by these companies is the serious lack of information about the target market. Even though the market potential for environmental products in Vietnam is significant, very little information is presented on how to access the potential, and turn it into tangible business opportunity.

It is obvious that the process of turning market potential into real business opportunities is a very lengthy and complicated one. However, if the companies can get hold of the right information, know the right people, use the right tools and go through the right channel, there will be a great chance for Finnish environmental enterprises to be successful in this challenging market.

1.2 Research question and objectives

Research question: Should Case Company enter the Vietnamese market? If yes, how should Case Company enter the market?

The objectives of this thesis are to assist a Finnish waste water treatment company (Case Company) in its decision, whether to enter the Vietnamese WWT market, and to identify relevant information needed prior to entering for the Case Company. In order to achieve this goal, studies are made to answer the following sub questions:

- How does the market function, who is present on the market?
- Where are the business opportunities for WWT products/systems?
- What is the current investment condition in Vietnam?
- What are the supports available for Case Company?

1.3 Case study

There are three parties involved in this study, Finpro, Finpro's client (Case Company) and the author (student).

Finpro is a service organization focused on accelerating internationalization of Finnish enterprises. The organization works primarily in consultancy for its Finnish clients, who are dominantly small or medium sized companies. Growing companies entering unknown markets are Finpro's ideal clients. (Finpro official website 2010.)

Case Company is a client of Finpro. Case Company specializes in planning and managing water, wastewater, and environmental technology solutions. The main areas of operations are municipal and industrial waterworks, wastewater treatment plants, and biological treatment method planning, project leading and construction. (Kieu 2010.)

The following Figure 1 describes the relationship of the parties involved in this study:

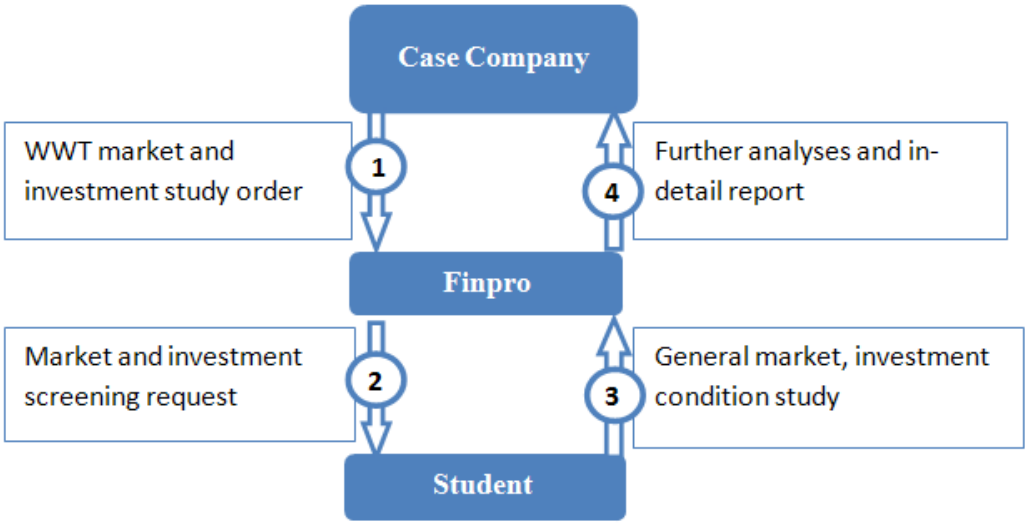


FIGURE 1. Parties involved in the case study.

Case Company is interested in entering the Vietnamese waste water treatment market. In this purpose, Case Company wants to make a comprehensive market and investment study in Vietnam concerning the actual market operators, competition and other relevant issues related to possible entry modes and has solicited for a quote from Finpro Viet Nam for the process.

The purpose of the assignment is to enable Case Company to make a Go/NoGo decision for entering into Vietnam's market as well as making the choice among different entry modes in Vietnam. This assignment is done by several parties; this thesis only forms a small part of the whole assignment, and is used to support Finpro, as well as its client in the final decision making.

1.4 Research methodology

According to Saunder, Lewis & Thornhill (2009, 43), research method forms an important part of the whole thesis. The research method section normally includes two parts: research design and data collection (Ibid., 43). While research design

section states the methods chosen in general and justifies the choices, the data collection sections provide the details of specific ways to obtain the data needed (Ibid., 43).

Research design: Important elements of a research design are research approach, method choice and data collection sources. Figure 2 gives an overview of the research design:

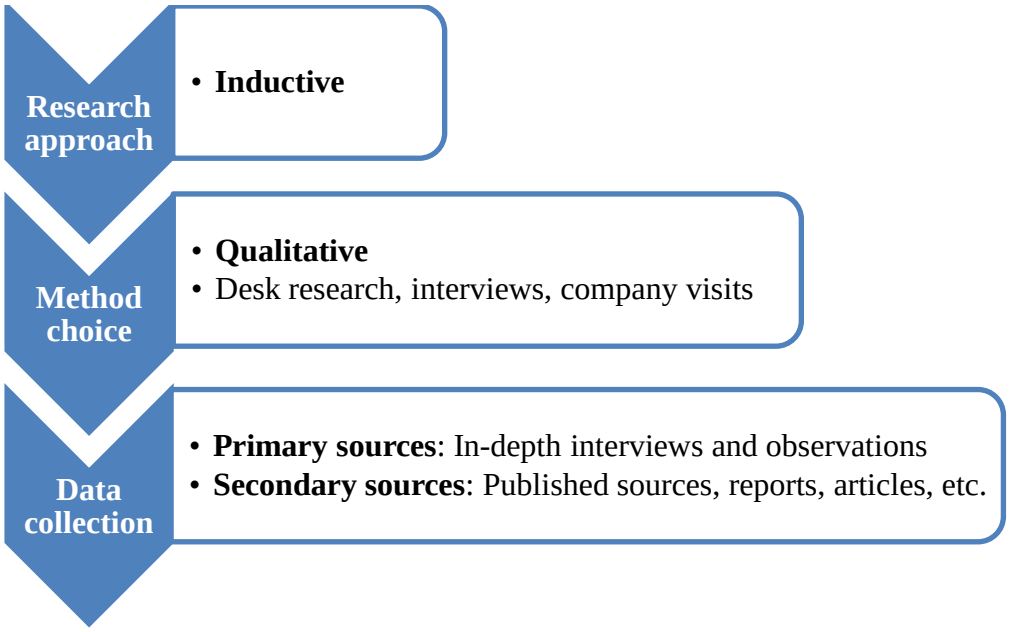


FIGURE 2. Research design.

In order to justify the choices made for research approach and method used, reviews of the related theories are given.

Firstly, a choice of research approach guides the researcher through the whole process. There are three different choices of research approach: deduction, induction, or combination. While the deductive approach requires the formation of hypotheses and research strategies to test the hypothesis, inductive approach involves the collection of data and development of theories as a result of the data collection. A combination approach, on the other hand, includes both building and testing of theories. (Saunders, Lewis & Thornhill 2009, 124.)

Secondly, while the research method is taken into consideration, there are also three different choices: quantitative method, qualitative method or mixed method. Quantitative method utilizes numerical data collection scheme such as questionnaires and results in numerical forms. In contrast, qualitative method uses data collection techniques such as interviews and generates non-numerical results. Mixed method, on the other hand, refers to the combination where more than one data collection technique and/or analysis technique is used. (Saunders et al. 2009, 152.)

Next, according to Miller R. (1988, 52), an accurate quantification of the defining elements of a market's potential is much more difficult to be obtained in emerging markets than in the more developed economies. Statistics relating to the segregation of demographic groups and their respective purchasing habits and abilities are often unavailable (Ibid., 52). When data do exist, they are frequently suspected due to their incorrectness and sometimes inflated nature (Ibid., 52).

Therefore, within the context of a bachelor thesis and the nature of the market screening request from Finpro, the author finds the inductive approach most suitable for the thesis research design. Since testing of hypotheses does not fit in the requirement of a market screening where much different data and resources need to be considered to find out the feasible opportunity. Regarding the choice of research method, the lack of available data and the closed nature of Vietnamese business practice lead the author to choose a qualitative method. With its flexible nature, qualitative method supports explorative findings and in-depth knowledge of the current business practice (Gray 2009, 166.)

Data collection:

The thesis is formed by two main parts, the theoretical framework and the empirical part. Different sources of data are collected respectively.

In the theoretical framework, data are collected mostly from published sources such as books, articles and theses about international business, export manage-

ment, entry modes and decision making models. In the empirical part, data are collected from personal observations, company reports, Vietnamese government publications, books, journals. Especially, invaluable insights were provided from in depth interviews with Ms. Kieu Phuong and Ms. Luong Hien, Senior Consultants of Finpro Vietnam, Mr. Do Van Khanh, Technical Manager of IVA Vietnam, Mr. Dang Son Ha, Managing Director of RCEE Environmental Consultancy, and Ms. Siv Ahlberg, Program Director of Finnpartnership.

1.5 Scope and limitations

Firstly, in order to make the decision of entering a new market, a company must consider many different influencing factors. These factors consist of not only market overview, investment conditions, supporting tools, but also other important factors such as logistical, cultural, technical issues, etc. It is understood that this thesis only functions as a screening study and there is still a lot of information needed from Finpro and the Case Company to complete the given assignment.

Secondly, this thesis deals with waste water treatment equipment market, in which the range of products is very broad. The difference in a nature of the products is also very significant as the product can range from huge sediment tanks and pipes to tiny chemical sensors. The thesis harmonizes the vast diversity in product range by considering WWT equipment as a whole system, given the fact that the Case Company can provide a complete system of WWT products. However, separate studies of products or groups of products are important if the company chooses to concentrate on a more specific function rather than the whole system.

Internal forces analysis, in addition, also needs to be further analyzed by the Case Company. Due to specific order, this thesis focuses mostly on external forces, especially Vietnamese WWT market conditions. Internal forces such as company abilities and product overviews are mentioned, but not studied in detail. It is suggested that the company conducts very specific analysis of its own capability prior to making the decision.

Next, in the external forces part, information about the Vietnamese WWT market, investment condition and Finnish supporting tools are gathered. Due to specific request of Finpro and Case Company, only three to four aspects of each section are mentioned. However, the author understands that there are many other aspects that need to be studied for the section to be complete. For example, investment conditions contain not only entry mode laws, WWT standards and incentives but many other important components such as logistic barriers, labor laws, intellectual property rights, etc.

Last but not least, the author faces many difficulties in the process of writing this thesis. The biggest obstacle is an extreme lack of market information as the waste water treatment market is a relatively new market in Vietnam. As a consequence, most of the primary data collected are from interviews and subjective observations are inevitable.

1.6 Thesis structure

The thesis structure is illustrated in the following Figure 3, in which C is the abbreviation for chapter.

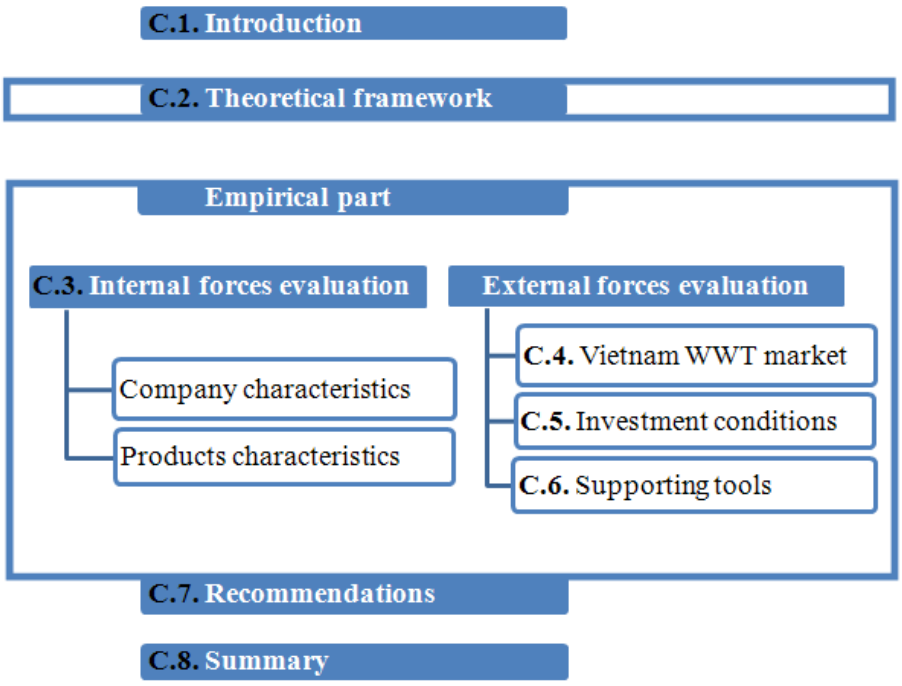


FIGURE 3. Thesis structure.

This thesis includes two main parts, the theoretical part and the empirical part. The theoretical part is located in chapter 2 of the thesis. This part is an overview of the models to be used in making the decision to go abroad, how to be successful in the target market, and what kind of information should be taken into consideration prior to internationalization. The models are then combined to form a framework which is later used in the empirical part that starts at chapter 3.

Chapter 3 contains company and product analyses. In this chapter, the nature of the company and the range of its products and services are discussed. Next, in Chapter 4, the first and the second sub-questions are answered. In this chapter, the readers can have an overview of the market, the decision makers, the competitors, their operational modes and a long list of potential partners for Case Company. Chapter 5 follows to answer the third sub-question of the research:”What is the investment condition in Vietnam?” Chapter 7 lists the supporting tools available for Finnish exporters of environmental products and the experts' opinion on these tools, which answer the last sub-question.

Last but not least, chapter 8 connects the dots and draws a big picture of Vietnamese WWT market as well as proposes feasible market entry mode(s) and recommendations for the Case Company; chapter 9 summarizes the key points of the whole thesis.

2 INTERNATIONALIZATION DECISION MAKING: MODEL AND FORCES

The models and analyzing tools used in the internationalization decision making are discussed in various theories in management science. In this chapter, the author reviews two different models and two analyzing tools to be used for the theoretical framework of the thesis.

First, the model of Cavusgil & Zou (1994) and relevant literature reviews concerning the model are presented. This model categorizes the factors affecting export marketing strategies into two aspects of internal and external forces. Even though this model is not exactly the answer for the framework needed by this thesis, it contributes very logical insights to the design of the final framework.

Second, the planning model of steps to success in export markets by Darling & Seristö (2004) is reviewed. The model is relevant to this thesis because it brings up very practical questions to be considered in order to be successful in the target market. The model includes ten keys steps, which concerns the planning in both before and after the entering decision. Only the first and the third key steps which assist the internationalization decision are taken into further studies.

After the models are reviewed, a thesis framework is formed by combining different factors relevant to the objectives. Analyzing tools are to be mentioned together with the components of the framework. Even though the tools are not new to most decision makers, they are especially helpful in analyzing the data in a concise and logical manner. The analyzing tools to be used are SWOT analysis and McKinsey 7S.

2.1 Internationalization decision making models

2.1.1 Cavusgil & Zou model of export marketing strategies and performance

Cavusgil & Zou model of export marketing strategies and performance is a widely studied model when it comes to export management and decision making. While some researchers utilize the model with an inductive approach of building hypotheses and then test them (Souchon & Diamantopoulos 1998; Richey & Myers 2001; O'Cass & Julian 2003), others use the model with a deductive approach of obtaining various data from many sources, then categorize the data to obtain an answer (Testfom & Lutz 2006; Williams 2006).

Despite different approaches to researching, all the mentioned researchers agree to one point that the Cavusgil & Zou model of export marketing strategies and performance is very basic, yet very applicable and important to decision making. The basic nature of the model also gives rooms for further modifications when different goals need to be attained. (Souchon & Diamantopoulos 1998, 146; O'Cass & Julian 2003, 368; Tesfom & Lutz 2006, 263; Richey & Myers 2001, 336; Williams 2006, 480.)

According to Cavusgil and Zou (1994, 3), the marketing strategy-performance relationship in the context of export ventures is affected by internal forces and external forces. These forces directly affect the export marketing strategy and in turn, affect the export performance (Figure 4). This model is relevant for the thesis because the analysis of export strategies not only specifies whether targets are attained but also identify the key factors to decision making in internationalization.

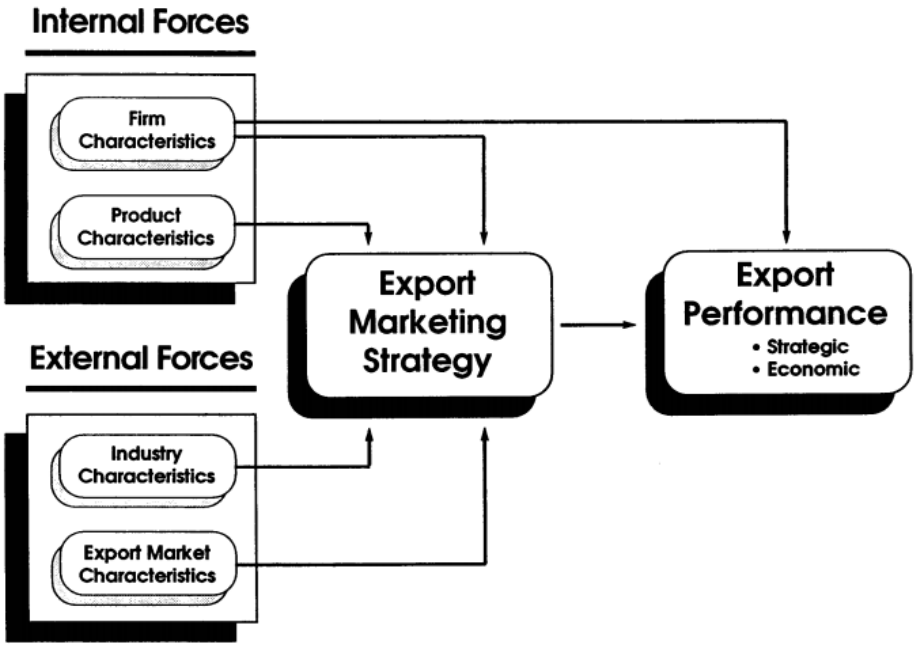


FIGURE 4. Cavusgil and Zou model of export marketing strategies and performance (Cavusgil & Zou 1994, 3).

The disadvantage of this model is the factors rooted from the macro environment are treated as industry or market characteristics. Many studies in the subject of internationalization emphasize the importance of macro environment factors such as local/foreign government supports and barriers, which are difficult to classify under these headings (O'Cass & Julian 2002; Richey & Myers 2001). Differences among views of different researchers toward the international process of the companies and the key factors for decision are also very significant (Whitelock 2002, 345). As a result, direct application of the Cavusgil and Zou model to the internationalization decision making process in this case is unsuitable. Thus, modifications are made to form a relevant thesis framework in the purpose of supporting internationalization decision making.

2.1.2 Darling and Seristö planning model

In the planning model of steps to success in export market by Darling, J. and Seristö, H. (2004, 30), there are ten key steps in the process of planning in order to be successful in the target market. The following Figure 5 illustrates the key steps and their interrelated connections:

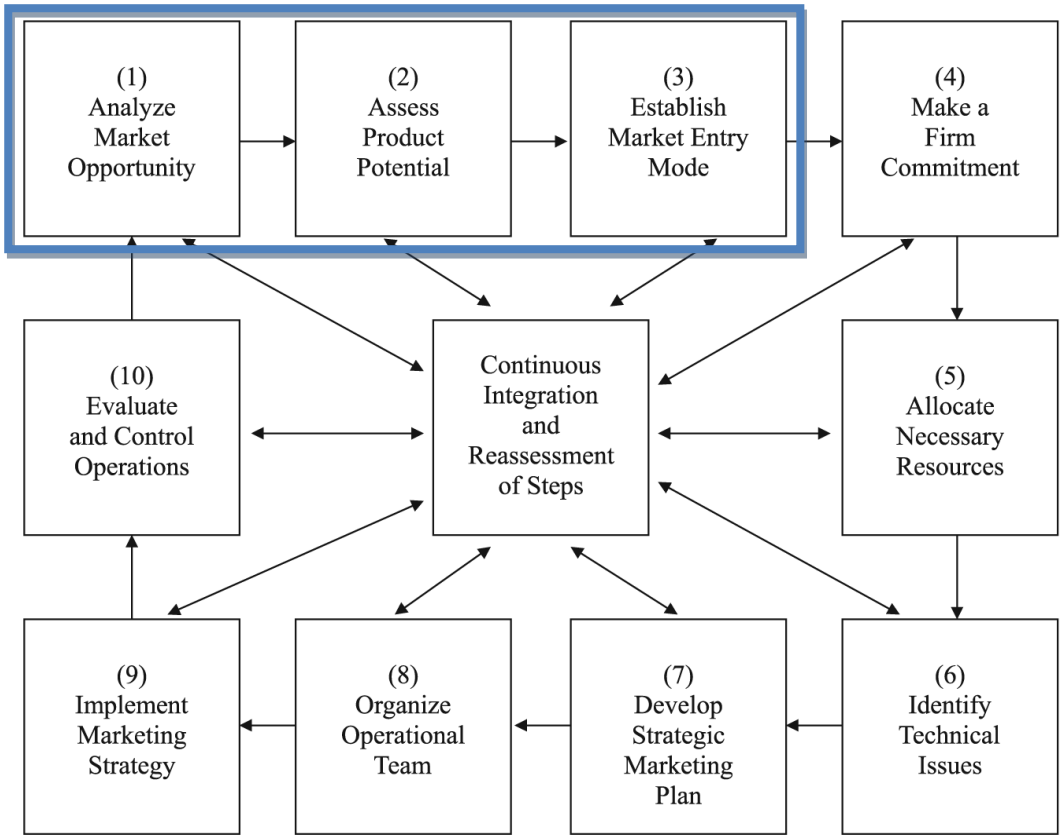


FIGURE 5. Planning model of steps to success in export markets (Darling & Seristö 2004, 30).

Even though the steps appear to be different in nature and can be viewed as distinct steps in the planning process for a foreign market, it is important to know that each of the ten steps is related to the other. In order to realize effective planning, it is required that the ten points are carefully reviewed and analyzed as an interactive paradigm. (Darling & Seristö 2004, 30.)

Prior to making a firm commitment, information about market opportunity, product potential and possible market entry modes should be obtained. Therefore, within the context and limitations of this thesis, the first and the third steps are taken into further studies. Darling & Seristö (2004, 32) have pointed out a set of ten questions in each step to guide the process of obtaining and evaluating information. In the following Table1 and Table 2, the two sets of questions concerning business opportunity and market entry modes are presented accordingly.

TABLE 1. Analyze business opportunity (Darling & Seristö 2004, 32).

1	What are the present and future domestic and foreign market situations and trends for the industry?
2	What are the geographic, economic and social foreign market segments of major importance?
3	Are there any major domestic or foreign government restrictions regarding the firm's product(s)?
4	What are the projected market sales and profit potentials?
5	What competitive products are sold in the foreign market, and what are the names of the firms that produce those products?
6	What are the market shares of major competitive products?
7	How do competitive products compare with the firm's foreign market reputation, product features, and other attributes?
8	What types of distribution intermediaries are used by competitors, and what are the major price accumulations and margins typically used by competitors?
9	How do prices of competitive products compare with the price(s) of the firm's product(s)?
10	What types of advertising and promotion are used by competitors, and how successful are they?

TABLE 2. Establish market entry mode (Darling & Seristö, 2004, 36).

1	What alternative entry modes are available for the product in the foreign market?
2	What alternative entry modes are used by importers of major competitive products?
3	What special trade agreements and/or preferential treatments exist for competitors?
4	Are there any major potential reputable partners available in the target foreign market?
5	How much control does the firm wish to maintain over the marketing of the product in the foreign market?
6	What types of pre- and post-sale services will the intermediary need to provide with the product?
7	What are the major problems that relate to distance and communication with the foreign market?
8	What logistical elements are important for the foreign market?
9	What are the legal issues that must be considered in dealing with the intermediary?
10	What are the various issues that need to be included in the working agreement with the intermediary?

With the background of more than 25 years as market consultants in European business firm, Darling and Seristö have pointed out the very essential 20 questions in the purpose of finding and analyzing market potentials and market entry modes. This information is undoubtedly very important to assist companies' managers in their decision to do business abroad.

In the author's point of view, the use of question lists by Darling and Seristö as a guiding tool to decision making is very practical and effective. However, the fact that only two steps of the model are studied in this thesis encourages the author to find a different method in categorizing information. Instead of finding the answer to the 20 questions given in chronological order, the author combines the relevant question with Cavusgil and Zou model export marketing strategies and performance to form the theoretical framework.

2.2 Thesis framework

Thesis framework is formed by many different components such as the requirements of the case company, the mentioned model of Cavusgil & Zou, the model of Darling and Seristö and several literatures reviewed. The following Figure 6 illustrate the result of the literature reviews, a thesis framework is formed. This framework will guide the steps of acquiring information for the internationalization decision making of the Case Company.

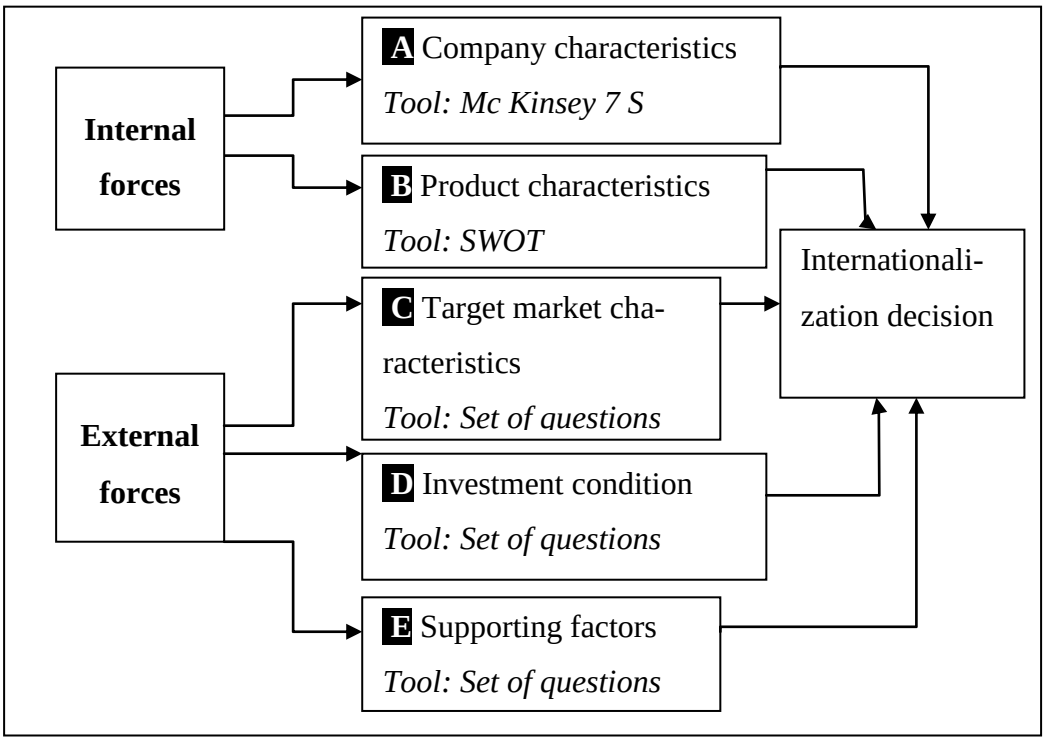


FIGURE 6. Thesis framework.

In the following subchapters, definitions and/or explanations are given to explain the components (A, B, C, D, E) of the thesis framework illustrated in Figure 6, as well as the analyzing tools used (Mc Kinsey 7S, SWOT). Utilizing the sets of questions given by Darling and Seristö, the author also forms three sets of questions to guide the process of searching information to the investment conditions, market characteristics and supporting factors. The content of the sets is given in subchapter 2.2.2.

2.2.1 Internal forces

Internal forces consist of many different components, in which company and product are the key ones. Within the scope and limitations of this thesis, internal forces are mostly done by the Case Company itself. However, internal forces such as information about the company and the product are so important that the author finds it difficult not to mention in the thesis. Thus, the information will be shortly studied using Mc Kinsey 7 S and SWOT analyses.

A Company ability/ Mc Kinsey 7S

The first component of internal forces is company abilities. Company's abilities refer to all the inner resources the company can provide to make an international decision such as financial resources, human resources, international experiences, etc. (Darling & Seristö 2004, 30). In this thesis, the overview of the company's ability is given using MC Kinsey 7S analysis.

Developed in the early 1980s by Tom Peters and Robert Waterman, Mc Kinsey 7S consists of internal aspects of an organization that needs to be aligned for the organization to be successful. The 7S model can be used in a wide variety of situations where an alignment perspective is useful. For example, to examine the likely effects of future changes within a company, to align departments and processes during a merger or acquisition, etc. (Mindtools 2010.)

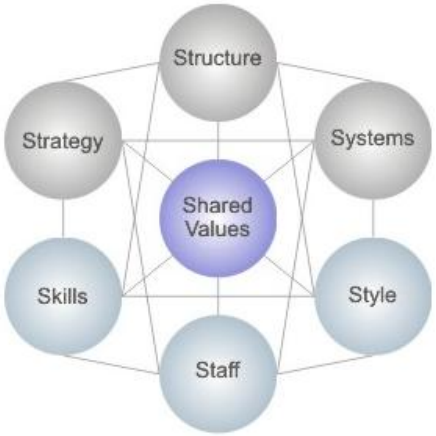


FIGURE 7. The Mc Kinsey 7S model (Mindtools, 2010).

Figure 7 gives an overview of the Mc Kinsey 7S, in which, hard elements such as strategies, structure and system are interrelated to soft elements such as skills, styles, staff to form shared values of the whole organization (Mindtools 2010).

B Product analysis /SWOT

The second component of internal forces is the product itself, many questions need to be answered such as: Can the product withstand the new requirements of the foreign market? Are there any adaptations needed? What are the strength and weaknesses of the product when it comes to the target market? (Darling & Seristö 2004, 29.) In order to give a basic answer to the questions, SWOT analysis is used to obtain an overview of the product.

According to Westwood (2006, 138), SWOT analysis is a very popular analyzing tool and can be used for many different purposes. SWOT stand for strengths, weaknesses, opportunities and threats. Figure 8 is an example of a SWOT product analysis.

TABLE 3. Example of SWOT product analysis.

• High quality • Easy to adapt to new environment **Strengths**	• High price • Require a large operating space **Weaknesses**
• Markets in devoping coutries more open for investors of the product. **Opportunities**	• Low priced products from Asia • Niche products from other EU countries **Threats**

In a SWOT analysis, the strengths and weaknesses generally refer to internal factors such as company and products factors while opportunities and threats are usually external factors that the company cannot directly control. SWOT enables managers to understand and exploit the company's strength, overcome weaknesses, get hold of opportunities and defend again threats. (Westwood 2006, 138.)

All in all, internal forces play a key role in the company decision to go abroad. Even though internal forces are not studied in detail in this thesis, it is highly recommended that the Case Company conduct a thorough study about their own resources and abilities.

2.2.2 External forces

With Finpro's specific request, external forces are to be studied in detail in this thesis. External forces consist of three main elements: Target market characteristics, investment conditions and supporting tools. In the below paragraphs, the components included in each element are reviewed.

C Target market characteristics

Analyze market opportunities is the first major step in the process of obtaining information to enter a foreign market. The ability to be successful in the foreign market depends greatly on the ability to collect appropriate and valid information about that market (Morgan et al. 2003, 288).

Table 4 is adapted from the list of ten questions about the market potential set of questions by Darling & Seristö (2004). The original list was reviewed and shortened accordingly with the needs from Finpro and Case Company. Literature reviews from relevant sources are then given to explain the key concepts of market segmentation and competitor analysis needed to answer the questions in Table 4.

TABLE 4. Market characteristics questions set (adapted from Darling & Seristö, 2004, 32.)

Market overview	
1.	What are the present and future domestic and foreign market situations and trends for the industry?
Market formation	
2.	What are the foreign **market segments** of major importance?
3.	Who are the **main players** in the market?
4.	Who are the **potential partners** present on the market?

Market segmentation

In order to answer the second question in Table 3, the theory of international market segmentation is reviewed. According to Business Dictionary (2010) definition, market segmentation is the process of defining and sub-dividing a large homogenous market into clearly identifiable segments having similar needs, wants, or demand characteristics. Its objective is to design a marketing mix that precisely matches the expectations of customers in the targeted segment.

Hollensen (2007, 246) divided the international market segmentation criteria into two main groups, one group of segmentation criteria by general characteristics and one by specific characteristics (Figure 9). Explanations of the words used in Figure 9 are as follows:

- Measurability: the degree to which the size and purchasing power of the resulting segments can be measured (Hollensen 2007, 247).
- Accessibility: the degree to which segments are sufficiently large or profitable (Ibid., 247).
- Actionability: the degree to which an organization has sufficient resources to formulate effective marketing programs (Ibid., 247).

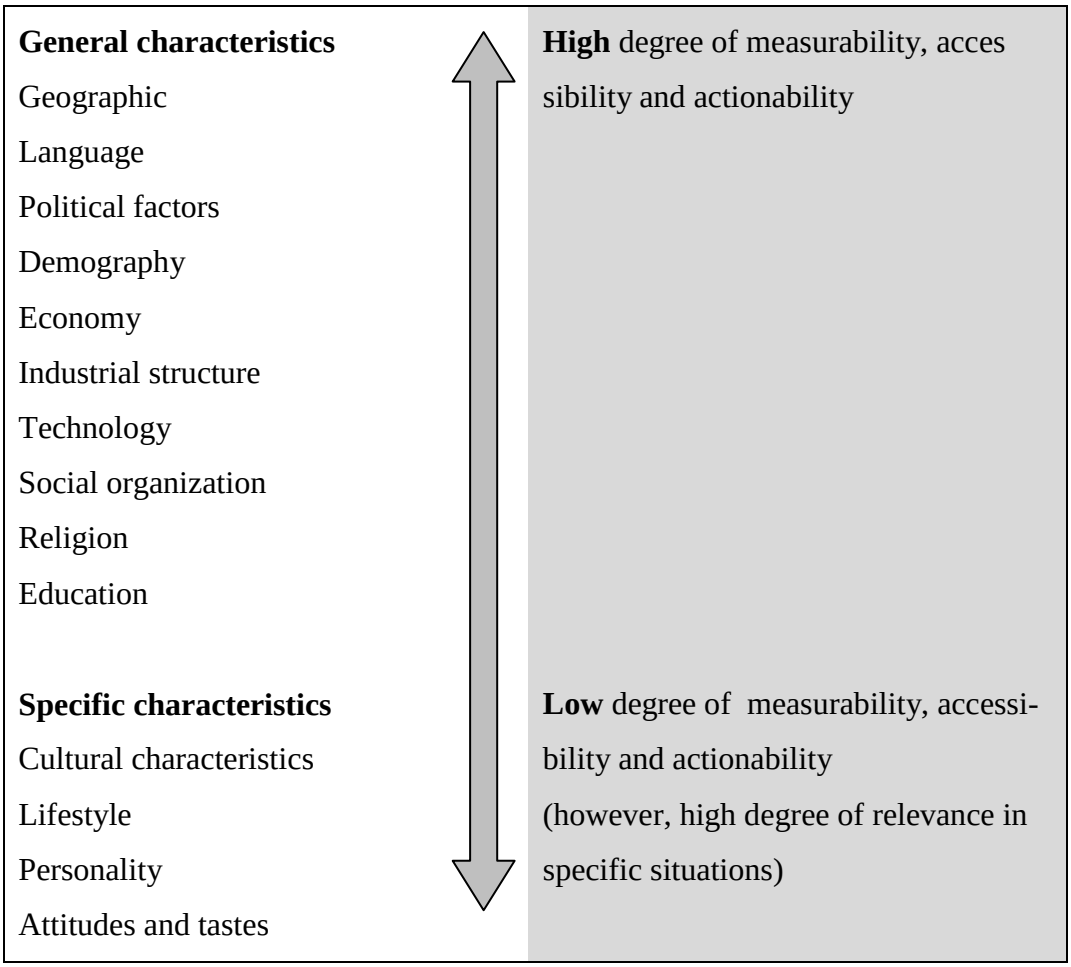


FIGURE 8. The basis of international market segmentation (Hollensen 2007, 247).

In order to find the suitable market segment(s) and the entry strategies for the chosen segment(s), Hollensen has mentioned four steps of actions. The first step is to generate the essential internal and external data to select appropriate segmentation criteria. Next, the second and third steps follow to develop the appropriate segment(s) and screen the segment(s) to narrow down the list of markets. The last step is to develop micro segmentation (smaller sub-segments in the chosen segment) and establish suitable market entry/strategies according to the chosen segment(s) or sub-segment(s). (Hollensen 2007, 246.)

In the author's point of view, market segmentation is applicable for many different goals, from domestics marketing strategies to internationalization decision making. It reminds the decision makers that every market is heterogeneous, and the understanding of this heterogeneity is crucial for any entry decision.

Competitor analysis

Business Dictionary (2010) defines "Competitor analysis" as follows: Strategic technique used to evaluate outside competitors. The analysis seeks to identify weaknesses and strengths that a company's competitors may have, then use that information to improve efforts within the company. An effective analysis will first obtain important information from competitors and then based on this information predict how the competitor will react under certain circumstances.

George Day, a professor at the Wharton School, has written: "One of the primary issues facing managers in formulating competitive strategy is defining the area of competition. Where are you competing? Who are your competitors? How attractive is the competitive arena?" (Harvard Business Essentials 2006, 66). It is clear that the markets have become too competitive to just focus on the customers alone, no effective managerial decision on entering a new market is complete without a thoughtful competitor analysis (Kotler, Keller, Ang, Leong & Tan 2009, 328).

Harvard Business Essentials (2006, 66-76) and Kotler et al. (2009, 328-355) have introduced the main components of a competitor analysis in slightly different orders. However, the core idea of three main steps remains very similar in both sources. Base on the core idea, the author presents the main steps in Figure 9.

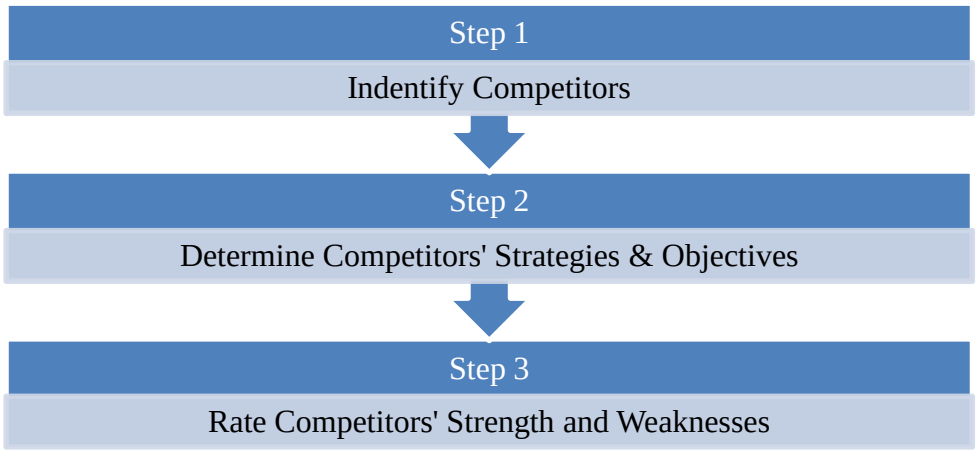


FIGURE 9. Competitor analysis.

The starting step of a competitor analysis is to identify the competitors. It is important to note that competitors consist of not only the companies that offer the same products. Competitors can sometimes come from many unanticipated sources, such as companies that make substitute for the products. (Havard Business Essentials 2006, 69.)

Once the potential and existing competitors are identified, the second step of determining competitor strategies and objectives follows. This step encourages the understanding of the competitor's purposes: What are they pursuing? Profit maximization? Dominant market share? While the strategies and objectives are identified, decision makers can see more clearly their main competitors, the ones that have similar objectives with their own company. (Havard Business Essentials 2006, 70.)

The last step is to analyze the information and find out the main competitors' strengths and weaknesses. This assessment helps the decision makers to benchmark their own company according to the best practice, avoid the common mistakes that cause their competitors' weaknesses, and find a way to differentiate their company and products. (Kotler et al. 2009, 332.)

D Investment conditions

Investment condition is the second part of external forces in this thesis framework. Once again, a set of questions (Table 5) is generated from the combination of literature reviews and Finpro requests. The main objectives of this part are to find out the alternative market entry modes in Vietnam and the standard laws and regulations for the WWT business.

Information about market entry modes forms an important component in this part. As a result, literature reviews of relevant sources are given for a general understanding of different market entry modes. Such basic questions such as: What does "entry mode" mean? What are the differences between the modes? Etc.

TABLE 5. Investment conditions questions set (adapted from Darling & Seristö, 2004, 34.)

Market entry modes	
1.	What alternative entry modes are available for the product in the foreign market?
Legal environment	
2.	What are the standard laws and regulations for WWT treatment systems in the foreign market?
3.	What are the current incentives given by the government of the foreign market?

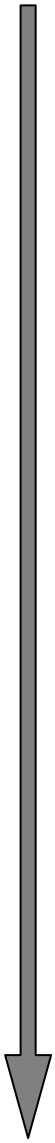
Market entry mode

According to Hollensen (2007, 291), an international market entry mode is an institutional arrangement necessary for the entry of a company's products, technology and human capital to enter a foreign country/market.

Market entry modes are widely studied in several international business books. Different authors may have different views on the entry modes, and different ways to categorize them. While Wall, Minocha & Rees (2010, 352) rank the entry modes in their degree of risk and reward, Hollensen (2007, 292) places the modes into three different categories: Export modes, intermediate modes and hierarchical modes. Likewise, Daniel, Radebaugh & Sullivan (2007, 450) uses three categories for entry modes, with slightly different names: Export modes, collaborative modes and foreign direct investment.

In order to review and compare the market entry modes categorization from different books, the author has made a side-by-side comparison table. The following Table 6 illustrates the differences between the views of Wall et al. (2010, 352), Hollensen (2007, 292) and Daniel et al. (2007, 450) concerning different market entry modes.

TABLE 6. Side-by-side comparison of different market entry modes literatures.

Wall et al. (2010, 352)	**Daniel et al. (2007, 450)**	**Hollensen (2007, 292)**
No category	Three categories	Three categories
 → Indirect exporting (through intermediaries) → Licensing → Direct exporting → Joint ventures → Direct investment and foreign manufacture **(Level of risk & reward increase)**	**Export modes:** → Direct export → Direct selling through the internet → Indirect export through intermediaries	**Export modes:** → Indirect export mode → Direct export modes → Cooperative export modes
	Collaborative modes: → Licensing → Franchising → Turn-key operations → Joint ventures → Equity alliances → Management contracts	**Intermediate modes:** → Contract manufacturing → Licensing → Franchising → Joint ventures → Strategic alliances
	FDI → Foreign direct investment	**Hierarchical modes:** → Domestic-based sale representatives → Foreign sales and production subsidiary → Region centers → Acquisition → Greenfield investment

Apart from simple and popular market entries such as direct export, direct selling through the internet, there are also other market entries such as: Turn-key operations, strategic alliance, green field investment, etc. Definitions and/or explanations for such market entries are given below in alphabetical order:

Contract manufacturing: Manufacturing is outsourced to an external partner, specialized in production and production technology (Hollensen 2007, 330).

Domestic based sales representatives: The sales representative resides in the home country of the manufacturer and travels abroad to perform the sale function (Ibid., 330).

Foreign branch: An extension and a legal part of the manufacturer (often call a sales office). Taxation of profits takes place in the manufacturer's country (Ibid.,359).

Franchising: The franchisor gives a right to the franchisee against payment, e.g. a right to use a total business concept/system, including use of trade marks (brands), against some agreed royalty (Ibid., 335).

Green field investment: A form of foreign direct investment where a parent company starts a new venture in a foreign country by constructing new operational facilities from the ground up. In addition to building new facilities, most parent companies also create new long-term jobs in the foreign country by hiring new employees. (Ibid., 330.)

Joint venture (JV): An equity partnership typically between two partners. It involves two "parents companies" creating the "child company" (the joint venture in the market) (Ibid., 339.)

Licensing: The licensor gives the licensee a right to manufacture a certain product based on a patent. The licensee has to pay royalty accordingly in order to retain the right. (Ibid., 332.)

Turn-key operations: A Turnkey operation is defined as a product or service concept that is complete, installed and ready to use upon delivery or installation. The product or service is then leased or sold to an individual to run as his/her own venture. (Denial et al. 2007, 450.)

E Supporting factors

In the author's opinion, the set of external forces that supports internationalization decision making would be incomplete without a careful study about the supporting factors. In the context of this thesis, supporting factors means the local and/or foreign assisting tools relevant for the company's operation.

In order to boost international cooperation, different countries offer different types of supports for their companies to go abroad. The supports are most significant in developed countries, especially when it comes to investing in developing countries and to improve the quality of life in these countries. Internationalization supports sometimes turn the most difficult, impossible market to enter into a possible one.

As a result, a set of questions is compiled to guide the process of acquiring information for the company in question. The set of questions is presented in Table 7 as follows:

TABLE 7. Supporting factors question set.

Supporting factors	
1.	What are the relevant organizations that offer support for internationalization
2.	What are the requirements for the support?
3.	How much/ how many percents can the company receive from the support?

Supporting factor (E) is the last external factor studied in the thesis framework; it also makes the last section of this chapter. The empirical part of this thesis is from chapter 3 to chapter 7; in which the mentioned factors A, B, C, D, and E are studied in real life situation.

3 COMPANY & PRODUCT ANALYSIS

Chapter 3 starts the empirical part of this thesis. In this chapter, information about Case Company and the product(s) are presented using Mc Kinsey 7S and SWOT analyses. Subchapter 3.1 corresponds with factor A in the thesis framework.

3.1 Case Company analysis

Mc Kinsey 7S analysis

Skills: Case Company has more than 8 years of experience in water and wastewater projects. The areas of expertise are engineering for industrial and municipal clients, turn-key deliveries and equipment deliveries, such as aerators, machinery of sedimentation basins or other parts of the process. Case Company's clients are mostly pulp and paper industry clients and municipal clients. An overview of Case Company previous experience is presented in Table 8. It is notable that this table only contains a small part of the Case Company's full reference. (Hassinen 2009.)

TABLE 8. Case Company's references (Hassinen 2009).

Client	Place	Project
Degremont Argentina S.A.	Botnia S.A., Orion Mill, Uruguay	Biological waste water treatment plant 104 000 m3/day
Skanska Tekra Oy / Myllykoski Paper Oy	Myllykoski, Finland	Expanding of biological wastewater treatment plant, 25 000 m3/day
Skanska Tekra Oy / Stora Enso Oyj	Veitsiluoto, Finland	Biological waste water treatment plant, 72 000 m3/day
UPM-Kymmene Oyj	Changshu Mill, China	Expanding of biological wastewater treatment plant, 30 000 m3/day

Strategy: In 2009, Case Company's total revenue is EUR 18 million, in which 60% of the revenue comes from export. The company's strategy is to further expand its operation abroad, especially in less developed countries. (Hassinen 2009.)

Structure: As can be seen in the following Figure 10, Case Company has two subsidiaries; one subsidiary is specialized in contracting plants while the other is specialized in machinery supply. This encourages the Case Company to offer its customer full-package services. (Hassinen 2009.)

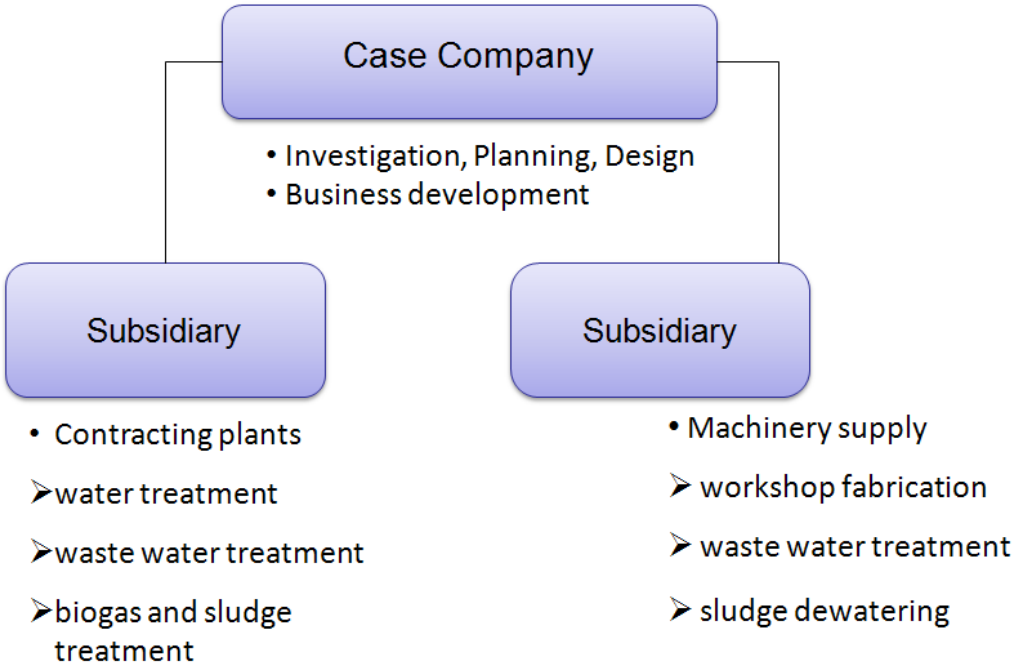


FIGURE 10. Case Company's structure (Hassinen 2009).

Staff: In 2009, Case Company has a total of 40 employees. Professional employees of Case Company have extensive experience and proven track record of implementing turnkey water supply and wastewater treatment projects worldwide. (Hassinen 2009.)

Style: the style of leadership adopted in Case Company is "participate". Decisions are made not only by the leader but also by other employees. Final decisions, however, are made and responsible for by the leader. This style is being used effi-

ciently in Case Company because many employees in the company are with more than 10 years of experience in WWT business. (Hassinen 2009.)

Where style of leadership is concerned, it is notable that the main style of leadership being used in Vietnamese companies nowadays is “authoritative", in which leader tells the employees what to do and how to do it. Unfortunately, this normally leads to very passive employees. A big difference in style of leadership is one of the most common reasons for failure in a Joint Venture between a Vietnamese and a European company. (Kieu 2010.)

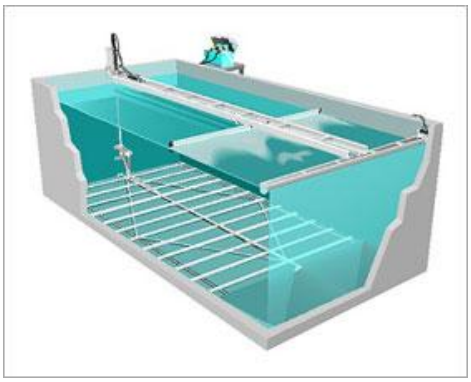
Systems: Case Company uses the system of parent and subsidiary companies. These companies supplement each other in their operations and use the same auditing service from KPMG Oy Ab. (Hassinen 2009.)

Shared Values: Ever since its establishment, Case Company has continuously developed its services and know-how in the field of environment, wastewater treatment in particular. The company’s common goal is to bring its expertise and state of art solutions for its clients, through high quality products and efficient system design. (Hassinen 2009.)

3.2 Product analysis

As mentioned in the thesis’ limitation, the wide range of WWT products from Case Company is treated as a full system, not individual products. However, in order to give the reader a better overview of what the company provides, some key products of the WWT system are briefly introduced in Table 9 this sub chapter. SWOT analysis of the company’s product (as a whole system) follows to give more insight into the product in the context of Vietnamese market. This subchapter of product analysis corresponds with factor B in the thesis framework.

TABLE 9. Examples of Case Company's main products (Hassinen 2009).

Product	Picture	Key features
Sand Washer		Dewater and wash sand from sedimentation tanks Minimization of odors Maximal outtake of sand
Screw Wash Press		Dewater of screenings Washes Dewaters Conveys
Bottom Sludge Scraper Z 2000		Sludge transportation No interruption of the sedimentation process Sludge thickening function
		**Example of the whole WWT system in Brazil:** Biological effluent treatment 120 000 m3/d

SWOT analysis

TABLE 10. SWOT analysis of Case Company's WWT system in Vietnam market.

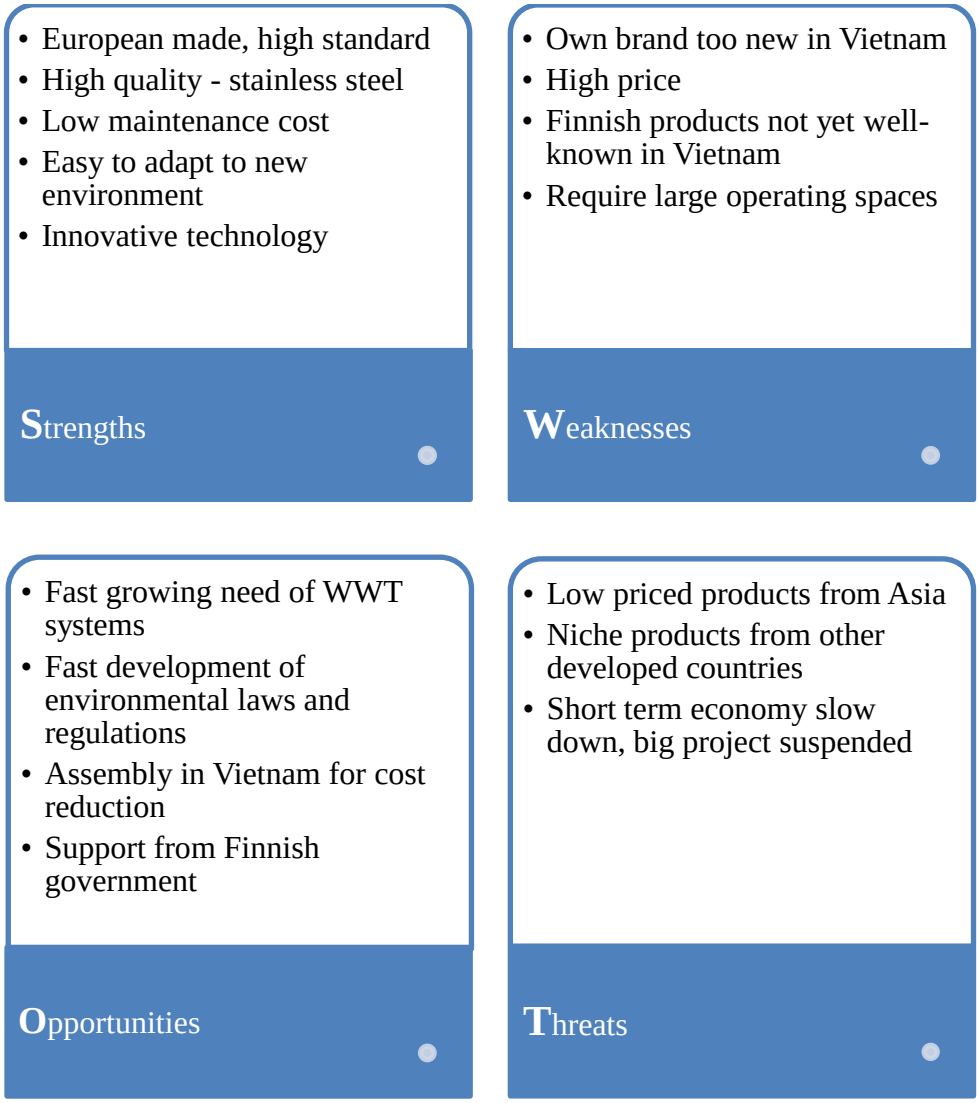


Table 10 is a SWOT analysis about Case Company's WWT system in Vietnamese market.

The weaknesses of the system are its high price and its large operating space. In addition, Case Company brand is still unknown in Vietnam and Finnish products have not yet been realized by Vietnamese as very high quality and reliable products. It is a paradox that in Vietnamese point of view, "European made "sounds more striking than "Finnish made".

Even though the WWT market is still new in Vietnam, the threats are significant. These threats come from developed countries such as America, Germany, Japan, of which products are already familiar to Vietnamese, or such countries as China, Taiwan, of which low-priced products are offered. Short term economy slowdown is as well a big threat for Case Company, as many sizable projects are suspended, or forced to cut cost and choose cheaper alternatives.

On the other hand, the strength of the Case Company lays in its ability to provide the customers with innovative and complete solutions. Most products of the company are of stainless steel, which can stand against the tropical climate in Vietnam. The Finnish WWT high standard and high labor costs also accustom the company to high quality and low maintenance requirements.

The Case Company has a lot of opportunities in Vietnam. The most important thing to be mentioned is the growing need for WWT system in this market. Even though the competition is as well growing fiercely, the insufficiency of local supplies higher the needs for imported products. Developments in law and regulation systems of the country is also an opportunity for Case Company, as there are more needs for high quality and highly adaptable products.

Last but not least, there are opportunities of local assembly in Vietnam to reduce the product/system price and to use Finnish's support as a mean to go abroad. The availability of Finnish support both in Finland and in Vietnam can be found in Chapter 6 of this thesis. In the coming chapter 4 and 5, further information about the Vietnamese WWT market and investment condition are discussed.

4 VIETNAM WASTE WATER TREATMENT MARKET

The objective of this chapter is to study the actual market for wastewater and sludge treatment in Vietnam, how is the market structured and who are the suppliers and customers actually present. Although the market situation is continually evolving, this information is necessary to make the correct internationalization decision. This chapter corresponds with component C in the thesis framework and is also the central part of this thesis.

As mentioned in the theory part, a set of questions are studied to give the answers for the current situation of Vietnam's waste water treatment market. In the following Table 11, the set of questions are brought up once again, adapted to the specific situation of waste water treatment equipment market. Relevant deliverables are also proposed.

TABLE 11. WWT market characteristics questions and deliverables.

Market overview		**Deliverables**
1.	What are the present and future domestic and foreign market situations and trends for the industry?	• Estimates of total WWT market size and growth rate.
Market formation		**Deliverables**
2.	Customer analysis: What are the foreign market segments of major importance?	• Important segments of the market and the potentials present in each segment. • List of foreign WWT equipment suppliers in Vietnam. • Long list of potential local partners. • Example of quotations for WWT system by local companies.
3.	Competitor analysis: Who are the main players in the market?	
4.	Who are the potential partners present on the market?	

4.1 Market overview

Market size and growth rate

In order to have an overview of the waste water treatment market, the estimated total market size and market growth rate are presented on Table 12. As can be seen from the table, the total market size of Vietnamese waste water treatment market in 2006 is 328 million Euros, with a growth rate of 15%. It is noticeable that the growth rate of imported equipment is growing four times as fast as that of the local production. A growing insufficiency in local supply in comparison with the total demand can be seen from the given percentages.

TABLE 12. Waste water treatment equipment market size and growth rate (Co Mac 2007).

Water and waste water Equipment/services	**2005**	**2006**	**Projected average annual growth (est.)**
	mil. Eur	mil. Eur	
Total market size	289	328	15%
Total local production	178	189	6%
Total Exports	0	0	0
Total Imports	111	139	25%

Market trend and common practices

The growing trend of import equipment needed for WWT plants in Vietnam is strengthened by the director of Sao Mai Xanh environmental consulting company, Mr. Tran Minh Quoc. Mr. Tran has said that most equipment for WWT plants is imported from abroad and then assembled in Vietnam. Mr. Tran has also estimated the value of imported equipments to be 60-65 % of the whole WWT plant. (Nguyen 2008, 142.)

According to M. Dang Son Ha, director of RCEE environmental consulting company, Vietnamese WWT treatment equipment is still growing at a very fast pace despite the short-term economy slow down. Starting from the implementation period of Kyoto Protocol (2008-2012), Vietnamese environmental equipment market has experienced a sharp increase in volume due to the profitable nature of tradable CERs. In this CDM (Clean Development Mechanism), certified amount of CO2 reduced in emission is compensated with CERs, the certificate that can be traded in the Carbon Market for money. (Dang 2009.)

In the United Nations Climate Change Conference, 2009, Copenhagen, however, a clear mechanism has not been laid out as the Kyoto Protocol did. Without further agreements between the participating countries, the future of CDM and CERs is to be left an unanswered question. Still, the good news for this source of finance for environmental projects comes from World Bank; WB has started buying CERs which commission time is after 2012 (Dang 2009).

Mr. Dang Son Ha has also said that the Vietnamese WWT market has a lot of potential. It is important to understand that the market consists of two main types of customers, the willing ones and the unwilling ones. While the former purchase WWT systems because they do care about the environment, the latter acquire the system to avoid fines from environmental police. Therefore, the unwilling ones always put low price at their first priority, while the willing ones considered the portfolio and experience of the provider carefully before choosing a WWT system of quality. (Dang 2009.)

As a consequence, it is suggested by Mr. Dang that the Case Company, as a new comer to Vietnamese WWT treatment market, should start looking to potential groups of customers in the industry that Case Company has the most experience working with. In this case, rather than finding potential in the whole Vietnamese WWT market, leads should be found in the pulp and paper manufacturing industry. After a period of working and a sufficient list of customers in Vietnam, however, Case Company can then expand its business to other industries. (Dang 2009.)

4.2 Customers analysis

In order to study the customers in Vietnamese WWT market, the four steps of action by Hollensen are used. The first step is to select suitable segmentation criteria. The second and third steps are to develop and screen the segments. The last step is to look for the opportunities presented in the segments/ micro segments. (Hollensen 2007, 246.)

Market segmentation criteria

The main goals of this market segmentation part are to identify the important groups of customers present on the market and to find out the current situation concerning WWT needs of the groups/segments.

In contrast to normal customer segmentation (consumer products), industrial customer tend to be fewer in number and purchase larger quantities. They evaluate offering in more detail, and the decision process usually involves more than one person (NetMBA 2010). In the case of WWT market in Vietnam, end users may sometimes be very different from the decision makers. For example, decision to purchase a WWT system for a paper manufacturing village is not made by the private manufacturers (end-users) but by the village's municipal council.

Due to the complicated nature of industrial customer segmentation, it is not feasible to apply the common segmentation criteria in the consumer product market (age, sex, personal preference). Relevant segmentation criteria for industrial customers/businesses are industry, location, company size, or decision making units.

In this case, the segmentation criterion to be used is company size (total production per annum). The market to be studied is not the whole Vietnamese WWT market, but the WWT market for pulp and paper industry only. Thus, prior to screening the segment in the pulp and paper WWT market, the composition Vietnamese pulp and paper manufacturers by size is presented.

Market segmentation by size

According to CP4BP (2009), there are approximately 500 pulp and paper manufacturers in Vietnam as of 2009, of which only 10% have WWT plants. The main reasons are the small scales of most pulp and paper factories, lack of space, fund and willingness to follow environmental rules (CP4BP 2009). Figure 11 shows the number of pulp and paper manufacturers of different sizes.

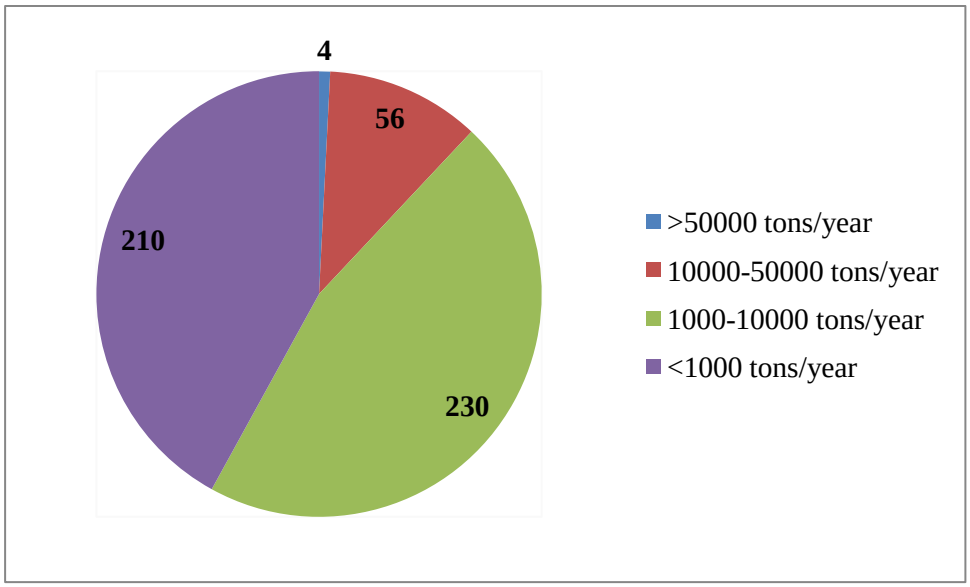


FIGURE 11. Vietnamese Pulp and Paper Manufacturers by size (CP4BP 2009).

As can be seen in Figure 11, only four manufacturers produce more than 50.000 tons/yr (less than 1% of the total number). On the contrary, nearly 50% of the manufacturers are small sized enterprises/households, whose output is less than 1000 tons per year.

In compare to other industries, the pulp and paper industry uses a larger amount of water in production and results in also a bigger amount of waste water. Together with dated facilities, the small sized manufacturers use on average 120 m3 of water per one ton of paper, ten times the amount of water needed in a Finnish paper manufacturing company. As a consequence, this industry has been on the black list of Vietnamese Environmental Police (VEP) in recent years.

Segments' opportunity screen

As illustrated in Figure 11, there are three main segments as follows:

- Large sized companies which produce more than 50.000 tons per year
- Small and medium sized companies which produce from 10.000 to 50.000 tons per year
- Small sizes companies/household which produce less than 10.000 tons per year

In the following subchapters (4.2.1 - 4.2.3), the chosen segments are studied to find out the possible opportunities present in each segment.

4.2.1 Large sized companies

As mentioned in Figure 11, there are four large sized pulp and paper manufacturers in 2009. However, as of 29th January 2010, VinaKraft- a foreign invested company has joined this group with a yearly output of 220000 tons (Vntrades 2010). In the following Figure 12, the size of the five largest pulp and paper manufacturers in Vietnam, as well as their age, growth rate and potential, are illustrated.

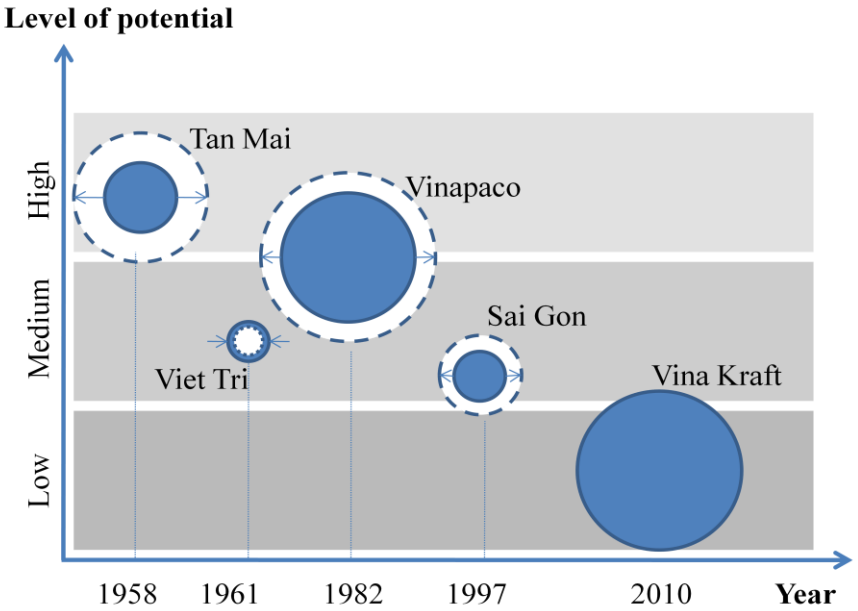


FIGURE 12. Large sized Pulp and Paper Companies.

In the following paragraph, explanations and reasons given for Figure 12 is stated. Further information about the five largest pulp and paper manufacturers in Vietnam is provided in the following order: Tan Mai, Viet Tri, VINAPACO, Sai Gon, Vina Kraft.

Tan Mai (Tan Mai Group JSC)

As illustrated in Figure 12, Tan Mai Group JSC is the company with the highest potential. The main reasons for this high potential are the fast expanding rate of the company and the need of renewing WWT facilities. The company is one of the oldest pulp and paper manufacturing company in Vietnam. Throughout the years, many changes have been made to increase the level of output and capacity of the company (Tanmai 2010). However, not so many changes have been made to the WWT facility in Tan Mai Group.

In March 2009, Tan Mai Group has purchased a complete paper manufacturing mill from Quebec, Canada with the price of 49 USD millions (Dongnai 2010). The production lines from the former mill are to be assembled in four new mills of Tan Mai in Dong Nai, Kon Tum, Quang Ngai and Lam Dong (Ibid.).

The first mill, the Tan Mai (Eastern) paper mill is located in Long Thanh district, southern Dong Nai, Vietnam, specializing in producing printing paper with an annual capacity of 150 thousand tons. The second, the Tan Mai - Quang Ngai pulp and paper mill has a capacity of 200 thousand tons of paper and 130 thousand of pulp a year. The third plant, the Tan Mai-Lam Dong pulp mill has a capacity of 200 thousand tons a year and the last, the Tan Mai-Kon Tum pulp and paper mill has a capacity of 200 thousand tons of paper and 130 thousand tones of pulp a year. (Lesprom 2010.)

These plants are expected to help Tan Mai triple its current production capacity. As a consequence, waste water treatment systems' renovation, enlargement, and/or newly build are expected.

Viet Tri (Viet Tri JSC)

Unlike Tan Mai Group JSC, whose main motive in building and renewing WWT system is its fast expansion rate, Viet Tri JSC is suffering from sharp declines in profit, reputation and market share (Baophutho 2010). The reasons behind this decline are dated facilities, inefficient management board and especially a serious environmental scandal in October 2008.

Viet Tri JSC has two manufacturing plants in Viet Tri, Phu Tho province, with the annual capacity of 55400 tons. One of the plants has been operating since 1961, without any kind of WWT system. 800 m3 of waste water is disposed daily into the Red River. MONRE has warned the company two times, one in 2007 and another in 2008. In 2008, VEP has fined the company for the mentioned environmental violations. Thus, despite Viet Tri JSC's lack of interest in WWT system, the company is ranked "medium" in the level of potential for Case Company.

VINAPACO (Vietnam National Pulp and Paper Corporation)

VINAPACO has been the first and the only Pulp and Paper Corporation in Vietnam. The corporation consists of many daughter companies, of which the biggest company is Bai Bang Pulp and Paper (Vinapaco 2010). The annual production output of the corporation is 235.000 tons, which is expected to increase by 26% in 2010 (Baomoi 2010).

Similar to Tan Mai Group JSC, VINAPACO is expanding its business by investing in many projects in 2010. The potential projects include: Thanh Hoa Pulp and Paper Manufacturing Project, Phuong Nam Paper Manufacturing Project and Bai Bang Expansion Project to increase the output of Bai Bang to 125.000 tons per year and of the whole corporation to 296.000 tons per year. (Baomoi 2010.)

Bai Bang Pulp and Paper experienced bad publicity in 2008 after a dweller in Phu Tho province wrote a letter of complaint to many different newspapers (Xalo 2008). However, this complain has not been taken further to official warnings of MONRE or fine from the VEP.

VINAPACO is undergoing valuation procedures and preparing for an initial public offering (IPO) in the first quarter of 2010. The result is expected to be further expansion and renovation of the corporation's mills in the third quarter of 2010. Thus, the reasons for the author to put VINAPACO in medium-high level of potential are mainly its fast expanding rate, financial source from IPO and its need to keep an image of a leading corporation in Vietnam.

Sai Gon (Sai Gon Paper JSC)

Sai Gon Paper JSC has been in operation since 1997 in Phu Nhuan Dist, HCMC with a total capacity of 90.000 tons per annum. In June 2009, Sai Gon Paper JSC started its expansion project to build Mỹ Xuan II mill in Mỹ Xuan A Industrial Park, Ba Ria, Vung Tau. This mill is expected to inaugurate in 2011 with a total capacity of 260.000 tons per year. (Saigonpaper 2010.)

In 2001, Sai Gon Paper JSC experienced more than 700 complaints from dwellers around its first mill. Since then, the company has been paying more attention to WWT system. The main reason to put Sai Gon Paper JSC in the low-medium potential category is its new biological WWT system in Mỹ Xuan II, which is expected to inaugurate in March 2010. The following Figure 13 illustrates the WWT systems to be used in Mỹ Xuan II mill. (Saigonpaper 2010.)

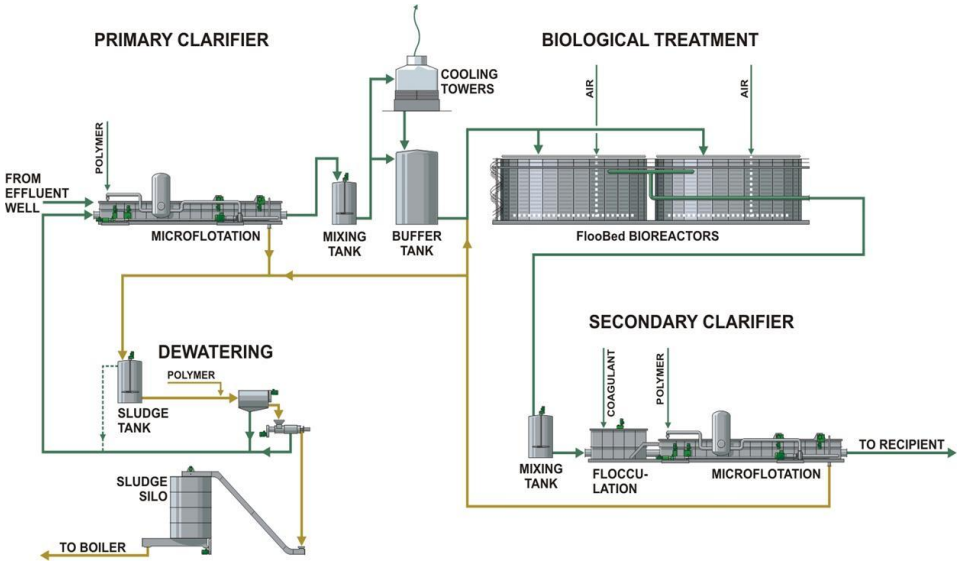


FIGURE 13. Mỹ Xuan II Biological WWT system (Saigonpaper 2010).

Vina Kraft

Located in Binh Duong Province, Vina Kraft Paper Company Limited, a joint venture between SCG Paper of Thailand and Rengo Company Limited of Japan, started its operation in January 2010. With an investment capital of 170 million USD and a production capacity of 220.000 ton per annum, Vina Kraft Paper is currently considered as the largest and the most modern packaging paper mill project in Vietnam. (Thai Ministry of Foreign Affairs 2010.)

Vina Kraft has a WWT system that worth approximately USD 10 Million, together with the nature of the project's owner (Thailand and Japan), it is unlikely that there will be any potential for the Case Company in the near future. This is also the reason why Vina Kraft is classified as very low potential in Figure 12. It is noted that FDI projects, as a common practice, use WWT system from the same country with the project owner(s) (Kieu 2010).

To conclude and summarize the opportunity presented in this segment, Table 13 is formed, which includes the companies' names, contact information, level of potential and reasons behind the potential. This Table is formulated in order of potential level.

TABLE 13. Summary of large-size companys' potentials

Name	Website/ Contact information	Level of potential	Main reason(s)
Tan Mai JSC	www.tanmaipaper.com	High	High expansion rate (200%) Environmental friendly image
VINAPACO	www.vinapaco.com	Medium-High	High expansion rate (26%) Recently IPO Leading corporation image
Viet Tri JSC	Thanh Mieu, Viet Tri, Phu Tho.	Medium	Bad environmental publicity Environmental fine by VEP
Sai Gon JSC	www.saigonpaper.com	Medium-Low	Potential expansion in 2011

4.2.2 Small and medium sized companies

Most small and medium sized companies are members of the Vietnamese Pulp and Paper Association (VPPA). VPPA is a non-governmental association which consists of companies from different fields related to pulp and paper production. VPPA members can have access to conferences and information database from VPPA against a yearly member fee. VPPA can also act as a channel for its members to show their concerns with the Vietnamese government's regulation makers. (VPPA 2010.)

VPPA is a trustable source of information for companies to get access to the latest technology and information. This is also a very reliable channel for Case Company to find its leads and/or to market its service to potential customers. Even though Case Company is hardly known by any member of VPPA, Case Company's customers such as Stora Enso and UPM Kymmene are world famous and named in most VPPA's publications.

The changes in the world's pulp price in 2007 the financial crisis in 2008 have forces many companies to consider changing their production facility to a cleaner and more economical one. However, the lacks of financial resources and technical knowledge have hindered many companies in making the changes. Apart from companies that are willing to change and understand the benefit of cleaner production, there are still many companies that have no knowledge about the idea and only resort to change when forced.

All in all, the potential areas in this segment locate in two main groups: the group of companies that is going to receive a significant amount of money via IPO and the group of companies that are forced to install WWT system by VEP (Table 14). It must be said, however, that the potential of these groups is medium to medium-low, since these groups are very price-sensitive in nature, and are likely to resort to cheaper alternatives offered by local companies using Chinese or Taiwanese WWT equipment.

TABLE 14. List of pulp and paper companies fined by VEP.

Name	Province	Date /Source	Problem	Note
Thanh Loi Co., Ltd	Lam Dong province	26.Dec.2009 (Vfei 2009)	Violation waste water standard	Case under process, fine unannounced
Tan Thanh Co., Ltd	Hoa Binh Str. Hiep Tan, Tan Phu Dist. HCMC	11.Oct.2009 (Canhsatmoit-ruong2009, a)	Violation of air and waste water standard	47 million VND fine, production banned until waste water treatment system is implemented
Binh Minh Co., Ltd	Tien Du Province	23.Sep.2009 (Canhsatmoit-ruong2009, b)	Violation of air and waste water standard	Case under process, fine unannounced
Hapaco Dong Bac Jsc	Hoa Binh Province	08.Aug.2009 (Vietnamplus 2009, a)	Direct dispose of untreated waste water into Ma river.	Case under process, fine unannounced
Hao Nam Co., Ltd	Linh Trung, Thu Duc Dist, HCMC	10.Nov.2008 (Vietnamplus 2009, b)	Direct dispose of untreated waste water.	Fine unannounced
Xuan Duc Co., Ltd	Phuoc Long A, 9 Dist. HCMC	06.Nov.2008 (Hiendaihoa, 2008)	Waste water treatment system under capacity, direct dispose of excess waste water.	Fine unannounced
Van Mai Co., Ltd	Mai Chau, Hoa Binh province	28.Jun.2008 (SGGP 2008)	Direct dispose of untreated waste water into Sia spring, Ma river.	Fine unannounced

4.2.3 Small sized companies

This segment is normally not considered as a segment with opportunity, due to the lack of purchasing power from the end-user point of view. However, the group of small-sized pulp and paper businesses in Vietnam are very different from the other groups. This group has a special feature to itself as it is very concentrate location wise.

Most of the small sized paper mills in Vietnam locate in Phong Khe paper craft villages in Bac Ninh, Hanoi (former known as Bac Ninh province). Paper production in Phong Khe has been experiencing fast increase (40% per annum) in recent years. It accounted for 16,42% of total paper product in Vietnam in 2006 and contributed significantly to Bac Ninh's economy. (Phong Khe Commune People Committee 2006.)

TABLE 15. Paper production in Bac Ninh (Bacninh 2009).

Items	Unit	Quantity
Number of paper mills	Mill	175
Number of paper production lines	Line	210
Production capacity per mill	Kg/day	400-10.000
Total paper production	Ton	180.000
Revenue from paper production	Billion VND	990

There are around 210 paper making lines in the commune with the capacity of 400-10000 tons/line/year (Table 15). The main inputs are wastepaper and bamboo from Hanoi and the surrounding areas. According to Bacninh (2009), Phong Khe disposes 4500 m3 of waste water containing heavy polluted effluents namely BOD, COD and SS into the environment. As a result, Ngu Huyen Khe River, once clean enough for agriculture purposes, has become "Dead River" due to its smelly, black water.

The situation has become so serious that Bac Ninh government has to issue a regulation in which each paper mill has to install its WWT system. However, in its 3 years of implementation, the regulation has not been a success for many different reasons. The reasons range from the lack of space and money for a WWT system to a common Vietnamese belief that a waste water tank in the backyard brings very bad luck for business. In 2009, only four mills in Phong Khe are equipped with environmental friendly production lines and more than 10 mills with basic WWT systems. (Bacninh 2009.)

According to Mr. Do Van Khanh, technical manager of IVA Vietnam, the reality of serious pollution in Phong Khe together with the proven ineffective regulation has forced the Bac Ninh government to rethink their approach to the commune's environmental problems. Bac Ninh government now understand that it is not technically possible ask for a WWT in each and every paper mill in the commune.

TABLE 16. Location and waste water volumes of plant groups in Phong Khe commune (Do 2010).

Locations	**Number of paper-making plants**	**Estimated wastewater volume (m3/day)**
Phong Khe Indutrial Cluster	52	800
Ben Hamlet - Duong O Village	43	650
Cau Tien Industrial Cluster	12	175
Dao Xa Village	28	250
Cham Khe Village	8	150
So and Sau Dong Hamlets	32	280

As a result, the Bac Ninh government is planning to build more IZs for paper manufacturers and is calling out for investment to build common WWT plants for groups of paper making plants (Table 16). This group can be classified into high potential customers for Case Company, as there are not yet many competitors in this market for craft villages' WWT, and Case Company can expect different types of support from Vietnam as well as from Finland by entering this market.

4.3 Competitors analysis

4.3.1 International competitors

In order to study about the competitors in Vietnamese WWT market, the three steps of action by Kotler are used. The first step is to identify the competitors. The second is to determine competitors' operational modes. The last step is to find out the main competitors' strengths and weaknesses. (Kotler et al. 2009, 328-355.)

Identify competitors

The Vietnamese waste water treatment market consists of more than a hundred players all over the World. The most active players come from such countries as Denmark, Finland, Holland, Japan, Sweden, Australia, France and America (Co Mac 2007). Due to growing market potentials, many international companies have set up representative offices (RO) and branches in Vietnam.

At present, different WWT products and technologies of different rankings are available in the market, from very low-end to high end products/ systems. The following Figure 14 gives the most popular company/ brand names in the market in three categories: High end, low end and mid end.

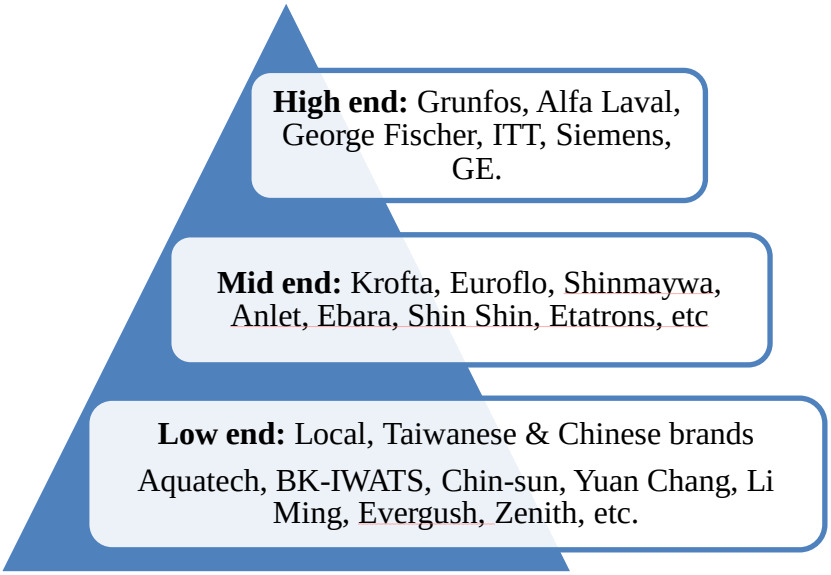


FIGURE 14. Popular WWT brands in Vietnam.

Competitors' operational modes

Due to the high quality in nature of Case Company's products, the direct competitors mainly come from mid end and high end categories. In the following Table 17, 18 and 19, the twelve most popular companies together with their operation modes and contact information in Vietnam are mentioned. Due to the lack of information, many other companies that sell directly to the government are not mentioned in the tables.

TABLE 17. Competitors that establish ROs and BOs in Vietnam.

Operational Mode: Representative Office/ Branch Office		
No.	**Company**	**Contact information**
1.	**Alfa Laval**	**Hanoi:** 7th Floor, HAREC Building 4A Lang Ha Street Phone: +84 4 772 50 67 Fax: +84 4 772 50 80 **HCMC:** Suite 801, 57-59 Ho Tung Mau St.Dist. 1. Phone: +84 8 38 29 02 16 Fax: +84 8 38 29 02 04
2.	**George Fischer**	**Hanoi:** 136E Tran Vu Ba Dinh District Vietnam/ Tel. +84 (4) 3715/ Fax +84 (4) 3715 3285
3.	**Kobold Instrument Inc**	**Hanoi:** No B4-7, 126 Hoang Quoc Viet Rd. Caugiay Dist. Tel: +84 4 755 4052 Fax: +84 4 755 4052 **HCMC:** 104/2A No Trang Long Str.Ward 14, Binh Thanh District, Ho Chi Minh City,Tel: +84 8 551 0677 Fax: +84 8 551 0678
4.	**Vietnam NORD Gear**	**HCMC:** 18 Nam Quoc Cang Street, Pham Ngu Lao Ward District 1 Tel: +84- 8-925 7270 Telefax: +84 8 925 7271

TABLE 18. Competitors that establish companies in Vietnam.

Operational Mode: Company		
5.	**Ebara Vietnam Corporation**	**Hanoi:** 13th Floor, Tung Shing Square, 2 Ngo Quyen Street, Hoan Kiem District Tel 84-4-3934-9601 Fax 84-4-3934-9617
6.	**GE**	**HCMC:** 7th Floor, Saigon Cente 65 Le Loi St., Dist. 1 Tel.: +84 8 914 6700 Fax: +84 8 821 9400
		Hanoi: V1505-1508, Pacific Place, 83B Ly Thuong Kiet street Tel.: +84 4 930 6400 Fax: +84 4 946 1515
7.	**Grundfos Vietnam Co. Ltd**	**HCMC:** Grundfos Vietnam Co. Ltd 1073/28A Cach Mang Thang Tam Ward 7, Tan Binh Dist. Tel: +84 8 3977 0454 Fax: +84 8 3977 0455
		Hanoi branch: Room 803 Thanh Dong Tower, 132-134 Kim Ma, Ba Dinh, Hanoi Tel: +84 4 38489282 Fax: +84 4 38489284
8.	**Siemens**	**HCMC:** Landmark Building, 2nd Floor 5B Ton Duc Thang Str., Dist.1
		Hanoi : Ocean Park Building, 9th Floor 1 Dao Duy Anh Str. Tel.: + 84-4-3577 6688 Fax.: + 84-4-3577 6699
9.	**V-Flygt Joint Stock Compa-ny**	**Hanoi:** No. 302, CT3-VIMECO Building, Trung Hoa Ward, Cau Giay District

TABLE 19. Competitors that use direct export, distributor or sale agent in Vietnam.

Operational Mode: Distributor		
10.	**Euroflo Pumps International Pte Ltd**	**Distributor: Dai Phong Trading Co., Ltd** 1F/13A Binh Gia Street, Ward 13, Tan Binh Distr, HCMC Tel: 84 8 3 7165044/45/46, Fax: 84 8 3 7165047
Operational Mode: Export/ Sales agent		
11.	**Severn Trent**	http://severntrentservices.com/en_us/about-us/company-information/our-company.aspx
12.	**Krofta Technologies Corporation**	http://www.kroftaengineering.com/index.html **Sale agent: CFTD Holdings** 4th floor, Thanh Cong Tower, 57 Lang Ha, Hanoi (84 4) 3835 3203

Main competitors' strengths and weaknesses

In Table 17, 18 and 19, operational modes of popular mid/high end competitors are identified. The operational modes reveal different levels of commitment of the companies to the Vietnamese market. In which companies that have established ROs or branches/ companies in Vietnam have a clearly deeper level of involvement in the market than companies with direct sale mode.

However, it must be acknowledged that strong commitment level does not guarantee success. While some ROs of companies in different field of business have helped to expand business and led to even higher level of commitment, many other ROs of have closed down pursuant to the extraordinary high operational costs in Hanoi or HCMC.

In the following paragraphs, three companies of three different operational modes are studied in further detail. The companies are: Alfa Laval, Siemens, and Krofta.

The reason for this choice is the similarity of the companies' offerings to Case Company's core products.

Alfa Laval

Alfa Laval (Sweden) specializes in heat transfer, centrifugal separation and fluid handling. Alfa Laval offers from individual products to complete industrial solutions in many industries such as beverages, bio fuels, oil & gas, pulp & paper, WWT, etc. With many years of experience in fluid handling, Alfa Laval has been an active supplier of machineries as well as complete industrial solutions in Vietnam. (AlfaLaval 2010.)

As mentioned in Table 17, Alfa Laval's operational mode in Vietnam is branch office mode (BO). Alfa Laval has a main office in Bangkok, Thailand and two branch offices in Hanoi and HCMC, Vietnam. The most current key project of the company in Vietnam is a contract with PVG to provide the equipment and engineering solutions for a 60 million Euros ethanol production plant in central Vietnam (Processingtalk 2010).

The strength of Alfa Laval lies at its ability to provide not only WWT solutions but also solutions for the relevant industries of its customers. For example, a package solution for a paper mill from Alfa Laval can includes WWT, production water reduction and pulp recovery. The availability of Alfa Laval's BOs in Vietnam is also favorable as customers from both North Vietnam and South Vietnam can easily get access to the company's representatives.

However, the company's broad offerings can sometimes hinder the concentration of expertise and specialization. With two BOs in Vietnam, the fact that there is not yet any Alfa Laval's local website shows an inadequacy in the company's branding potential. As a result, Alfa Laval is still a strange brand name for many decision makers in pulp and paper industry.

Siemens

Siemens inaugurated representative offices in Ha Noi and Ho Chi Minh City in 1993. The rapid expansion of its business relations with Vietnam prompted Siemens to establish Siemens Limited in 2002 and Siemens Automation Systems Limited in 2005. In fiscal year 2008 (October 1, 2007 – September 30, 2008), sales to customers in Vietnam amounted to EUR 165 million. New orders totaled EUR 117 million. Siemens currently has around 220 employees in Vietnam. (Siemens 2010.)

The strength of Siemens lies in its famous brand in Vietnam and Worldwide. Similar to Alfa Laval, Siemens Water Sector offers a wide range of WWT treatment products and solutions for different industries and has broad reference projects in Asia. The company's human resources available in Vietnam also encourages good startup services and maintenance.

Siemen has a very strong foothold in infrastructure and power generating projects in Vietnam. However, the number of Siemens' WWT projects in Vietnam is still limited. With broad offerings in many different fields, little resources are currently used for WWT projects.

Krofta

Krofta Engineering Limited, India was started in 1983 with technical collaboration with Krofta Technologies Corporation, USA. Krofta specializes in Dissolved Air Floatation clarifiers, WWT equipment for Pulp and Paper, Petroleum, Desalination industries. From 2006, Krofta chooses CFTD, a Vietnamese company based in Hanoi, as its sales agent. (Kroftaengineering, 2010.)

While Alfa Laval and Siemens offer products and solutions in many different industries, Krofta specializes only in WWT equipment. Krofta is a successful example of a WWT equipment supplier in Vietnam. Even though the company does not have any branch of its own in the country, Krofta has been winning many projects to supply WWT equipments for Pulp and Paper mills.

The strengths of the company lie in its broad reference of more than 150 paper mills in India and 12 paper mills Vietnam. It can be said that Krofta has a lot of experience working in developing countries. The ability to provide "American" technology with an "Asian" price also account for one of the strongest selling points for Krofta products.

One of the limits of Krofta's sales agent, CFTD, is CFTD's multidisciplinary as a sales agent for many companies. By working as a sales agent for many companies that sell many types of products, it is clear that the agent's resources are scattered and it cannot be able to concentrate in any specific product. Furthermore, CFTD presents only in Hanoi. Currently, the agent has no office in HCMC. Nevertheless, CFTD has proven to be an efficient agent. The most current project of Korfta with CFTD as its agent is a WWT plant for Binh An paper mill of Tan Mai Group JSC (Tintuc.xalo 2010). Table 18 contains the names of Krofta WWT projects in Vietnam.

TABLE 20. Krofta WWT projects in Vietnam (Krofta 2010).

Krofta WWT projects in Vietnam	
1. ADT 2000 Saigon Paper 2. Effluent Tan Hong Import-Export (JSC) Treatment Plant 3. Effluent Tan Man Mai JSC. 4. SPC 12 Cau Dong Paper Mill 5. SPC 36 Cau Dong Paper Mill 6. SPC 12 Hapaco JSC.	7. SPC 12 Hapaco JSC Mai Chau. 8. SPC 18 Dong Nai Paper JSC. 9. SPC 18 Hapaco JSC. 10. SPC 18 Phuong Dong Paper 11. SPC 18 Song Lam Paper 12. SPC 18 Thanh Dung Co. Ltd.

While international competitors have many similar offerings to Case Company (direct competitors), local Vietnamese WWT companies mostly import equipments from abroad, thus can be Case Company potential partners. In the following subchapter, lists of local competitors/ potential partners are given.

4.3.2 Local competitors/ potential partners

The following Tables 21 and 22 give the long lists of potential partners for Case Company. This information is important if the Case Company chooses to use a local distributor, sales agent or to partner for local assembly. In such case, these long lists need to be shortened by Finpro's analysts before meetings are arranged between Case Company and the short listed potential partners.

TABLE 21. Long list of large-sized potential partners.

Name	Source/ Website	Services/ Products	Notes
Cocomo Co., Ltd.	cocomo-vn.com	Water & solid waste treatment, supplier of waste water equipment.	Portfolio consist of mostly Japanese hotels & factories
Vietnam Green Environment Company	www.vnxanh.com	Design, install, consultancy & supplier of environmental equipment and services	ISO 9001:2000 Broad portfolio consists of mostly residential quarters, commercial estates, textile & dyeing factories.
Viwase JSC.	www.viwase.vn	Water supply, drainage &sewarage, waste water treatment	Broad Portfolio of many ODA projects.
Water and Environment JSC.	www.wacocorp.com	Engineering, procurement Distributor of water supply and sewerage equipment consulting and training services	EPC of many projects: Kenh Dong, Sa Dec, Phan Rang water treatment plants Broad portfolio.

TABLE 22. Long list of medium-sized potential partners.

Name	Source/ Website	Services/ Products	Notes
Asenco Co., Ltd.	asen-co.com.vn	Supplier of waste water equipment & engineering services	Small portfolio, EPC of Long Giang pulp and paper factory (10.000 tons/yr)
Asiatech Co., Ltd.	www.asiatech.com.vn	Waste water treatment services	Appendix 1. Example of Asiatech's WWT quotation
Cam Tam Co., Ltd.	www.cawatech.com.vn	Waste water treatment services	Small portfolio consists of mostly industrial parks & industrial zones
Duc Phat JSC	xu-lynuoc.net	Engineering, chemicals & equipment supply, consulting	Subcontractors of many projects, supplier of chemical & sediment tanks
Hai Thu Ltd.	www.haithu.com.vn	WWT equipment supply	Equipment supplier for many pulp & paper projects in Vietnam
Vietfilter JSC.	www.vietfilter.vn	Water treatment equipment supplier	NI
Dong Vinh Co., Ltd.	www.dongvinh-group.com	Water treatment equipment and chemical supplier	NI
Hung Phuong Ltd.	www.hungphuong.com.vn	Complete waste water treatment systems	EPC, portfolio consists of mostly chemical companies, schools & residential areas
Van Lang Co., Ltd.	www.vlc.vn	WWT equipment supply	Subcontractors: food processing plants, medical production plants & garment plants.
Viet Nhat Co., Ltd.	www.vietnhat.net	Supplier of waste water equipment	NI

5 INVESTMENT CONDITIONS IN VIETNAM

The objective of this chapter is to achieve sufficient understanding of investment conditions in Case Company's business sector in Vietnam, the available options for market entry as well as relevant laws and regulations in the sector. As mentioned in the thesis framework, a set of questions are studied to give the answers for the investment condition in Vietnam. In the following Table 21, the set of questions are brought up once again together with the relevant deliverables, adapted to Case Company's specific requirements.

TABLE 23. Investment conditions questions and deliverables.

Market entry modes		**Deliverables**
1.	What alternative entry modes are popular among WWT companies in the Vietnamese market?	• Popular alternative entry modes, pros and cons of each mode
Legal environment		**Deliverables**
2.	What are the WWT standards in Vietnam?	• Latest Vietnamese industrial waste water standard (2009)
3.	What are the current incentives given by the government for WWT enterprises?	• Latest Decree (2010) on incentives given by Vietnamese government to Environmental enterprises.

5.1 Alternative entry modes

As mentioned in Chapter 4 of this thesis, many international companies in WWT sector choose to enter Vietnam using an agent/ distributor, establishing a RO or BO. In the following paragraph, these modes are discussed in further details. Establishing a Joint Venture (JV) or a company, however, are not discussed because

of the high failure rate of JVs in Vietnam and the early stage of entry that make establishing a company unsuitable.

Establishing a representative office (RO)

A representative office is favorable when a company wants to establish its official present in Vietnam to do market research, or to manage vendors and contractors. Under a RO license, a company can rent office space, employ local staff and a limited number of expatriate staff. It is noted that representative office license permits the foreign company to open only one office at one site. Should the firm wish to open a second office in the same city or, more commonly, in a different city, another license is required. (Luong 2010.)

A representative office license is one of the easiest licenses to be obtained for an official present in Vietnam. It also requires very straight forward procedures and is exempt from corporate tax auditing requirements. However, the most important limitation of the RO license is that the company is restricted from directly generating revenue in Vietnam. Thus, such activities as trading, rendering professional services, revenue collection, or subleasing of its office space are strictly prohibited. (Luong 2010.)

Despite the restriction from direct revenue generating activities, many RO in Vietnam use the blurry line between direct and indirect profit making activities to generate profit. For example, RO employees contact customers directly under a direct marketing approach, which is not illegal. When the customer decides to purchase, contracts are made directly between the customer and the head office out of Vietnam. The head office can then authorize RO employee to sign the contract. (Kieu 2010.)

High monthly costs are also expected in maintaining a RO in Vietnam. According to Ms. Kieu Nam Phuong, senior consultant of Vietnam Finpro office, the company should expect to spend at least EUR 2500 for an effective RO in Vietnam. This cost is higher than that of many other Asian countries; the reasons are the high costs for A-class office building in Hanoi and for skilled employees.

Establishing a branch office (BO)

An alternative for a representative license is a branch office license, under which the company can engage in activities that directly generate revenues in Vietnam. Decree 72/2006/ND-CP dated July 25, 2006 states that "Foreign businesses can establish their branches in Vietnam (hereinafter "Branches") in accordance with Vietnam's commitments in international agreements that the country is a member of, to carry out goods purchasing activities and other activities directly related to goods purchasing in accordance with Articles 16, 19, 20 and 22 of the Commercial Law and the regulations as specified in the Decree". Unlike a RO, a BO is fully liable for Vietnamese taxes on its assets and activities. The time taken for applying for a BO is also longer. (Luong 2010.)

Using sales agents/ distributor

A Vietnamese agent sells a foreign supplier's goods in Vietnam for commission. In this case, the sale is normally transacted between the foreign supplier and a local buyer in Vietnam while the Vietnamese agent typically performs the following responsibilities: market intelligence, identifying sales leads, pursuit of sales leads, sales promotions, sales closing, product warranty and after-sales services, etc. The specific responsibilities of a Vietnamese agent depend on the agency agreement between the agent and the foreign supplier. The risk of non-payment rests with the foreign supplier. Vietnam's Trade Law recognizes the right of foreign companies to appoint agents provided that the Vietnamese agent's registered scope of business includes such activities. (Luong 2010.)

Under a distributorship arrangement, the question of legal protection and recourse is clear. The Vietnamese distributor buys the goods from the foreign supplier for resale in Vietnam and thus is liable for the full amount of the goods purchased. In many cases, a distributor also acts as an agent for the same foreign supplier and this typically occurs when a local buyer wants to purchase directly from the foreign supplier commonly in a contract of high value. (Luong 2010.)

An agent or a distributorship arrangement is a good way to avoid many cumbersome paper works in Vietnam. This mode of entry is also being used successfully by many Finnish companies operating in Vietnam. The key to success of this entry mode is the ability to find an active, committing agent with established liaisons with local officials and companies. While some agents work very efficiently, others only sign the agent agreement in order to put a famous international company name in their profile and to receive marketing supports from the international company. It has been a big problem for international companies when their agents are non-focused; these agents sign many agreements with many different international companies and then sell only on the best profit-making product.

Different modes of entries should be carefully considered when a company decides to enter the market, as this is crucial to the success of that company in the chosen market. The following Table 24 gives the recap of the pros and cons of three popular modes of entry in Vietnam.

TABLE 24. Pros and Cons for different modes of entry (Luong 2010; Kieu 2010).

Mode of entry	**Pros**	**Cons**
Representative office	• Easy and fast to establish • No tax nor auditing requirements	• Not permitted to direct profit generating activities • Expensive to establish due to high cost office rents in VN
Branch office	• Permitted to direct profit generating activities • Focus	• Not permitted to direct profit generating activities • Fully liable for tax and auditing requirements
Distributor/ Agent	• Relatively cheap • Avoid red tape • Liaison of distributor/agent with Vietnamese officials and local companies	• Non-payment risk rests with foreign supplier (agent) • Non-focus

5.2 Wastewater standard

The latest Vietnamese National Technical Regulation on Industrial Wastewater is QCVN 24: 2009/BTNMT, published in 16th November 2009 by MONRE Vietnam. This regulation is going to replace the currently used TCVN 5945:2005 from January 2010. In the following Table 26 and 27, the Industrial Waste Water standards of 2005 and 2009 are given side by side.

TABLE 25. Industrial Waste Water Discharge Standard 2005-2009 (MONRE 2010).

No	Parameters and Substance	Unit	TCVN 5945:2005		QCVN 24:2009/BNTMT	
			A	B	A	B
1	Temperature	^{0}C	40	40	40	40
2	pH value	-	6-9	5,5-9	6-9	5,5-9
3	Smell	-	Normal	Normal	Normal	Normal
4	Color (Co-Pt with pH = 7)	-	-	-	20	70
5	BOD_5 (20^0C)	mg/l	30	50	30	50
6	COD	mg/l	50	80	50	100
7	SS	mg/l	50	100	50	100
8	Arsenic	mg/l	0,05	0,1	0,05	0,1
9	Mercury	mg/l	0,005	0,01	0,005	0,01
10	Lead	mg/l	0,1	0,5	0,1	0,5
11	Cadmium	mg/l	0,01	0,02	0,005	0,01
12	Chromium (VI)	mg/l	0,05	0,1	0,05	0,1
13	Chromium (III)	mg/l	0,2	1	0,2	1
14	Copper	mg/l	0,2	1	2	2
15	Zinc	mg/l	1	2	3	3

TABLE 26. Industrial Waste Water Discharge Standard 2005-2009 (cont.) (MONRE 2010).

No	Parameters and Substance	Unit	TCVN 5945:2005		QCVN24:2009/BNTMT	
			A	B	A	B
16	Nikel	mg/l	0,2	1	0,2	0,5
17	Manganese	mg/l	0,2	1	0,5	1
18	Iron	mg/l	1	5	1	5
19	Tin	mg/l	0,2	1	0,2	1
20	Cyanide	mg/l	0,05	0,1	0,07	0,1
21	Phenol	mg/l	0,1	0,4	0,1	0,5
22	Mineral oil & fat	mg/l	5	5	5	5
23	Animal oil & fat	mg/l	10	20	10	20
24	Residual Chlorine	mg/l	1	2	1	2
25	PCB	mg/l	0,003	0,01	0,003	0,01
26	Organic phospho-rous	mg/l	0,3	0,1	0,3	1
27	Tetrachlorethylene	mg/l	0,05	0,1	0,1	0,1
28	Sulfide	mg/l	0,2	0,5	0,2	0,5
29	Fluoride	mg/l	1	2	5	10
30	Chloride	mg/l	500	600	500	600
31	Amonia (as N)	mg/l	1	2	5	10
32	Total nitrogen		15	30	15	30
33	Total phosphorous		4	6	4	6
34	Coliform		3000	5000	3000	5000
35	Gross α activity		0,1	0,1	0,1	0,1
36	Gross β activity		1,0	1,0	1,0	1,0

According to TCVN12:2008/BTNMT, National technical regulation on the effluent of pulp and paper mills, newly build paper mills need to comply with a stricter limit of color and COD than the mills that are already in operation. However, starting from 01 January 2015, all paper mills in Vietnam have to comply with the new regulation. As a result, currently operating paper mills will have to update their WWT facilities before 2015 in order to meet the new standard.

5.3 Investors' incentives

Decree No. 04/2009/ND-CP dated 14/01/2009 states that Vietnamese government offer corporate income tax incentive, VAT incentives and marketing incentives for environment enterprises. Further guides for specific incentives rate and enforcement of the decree are found in MONRE official website, document No. 230/2009/TT-BTC dated 08/12/2009. In the following sub chapters, the main points of the decree are identified.

Corporate income tax incentives

As of January 2009, the standard corporate income tax is reduced from 28% to 25%. For enterprises that operate in environmental protection business, a lower tax rate is applied. Specifically, from January 2010 (45 days after the guide is signed), corporate income tax of such enterprises are calculated as follows:

- A corporate income tax rate of 10% is applied on the part of income generated from environmental protection business;
- Newly formed environmental protection enterprises in special difficult geographical areas are exempted from 4 years of income tax from the first profit making year, and a 50% tax reduction for the following 5 or 9 years, depending on the level difficult in the area.

VAT incentives

VAT is imposed on the supply of goods and services at three rates: a standard rate of 10% and reduced rates of 0% and 5%. VAT incentives applied for environmental protection equipments are as follows:

- VAT rate of 0% is applied to imported environmental protection equipment that is yet to be manufactured in Vietnam;
- A list of products that have already been manufacture by local Vietnamese company is used to decide whether the imported equipment is qualified for the exemption. This list can be found in Vietnam Ministry of Planning and Investment (MPI).

Marketing incentives

The costs of marketing for environmental protection products are deductable from corporate income. The costs of marketing qualified for deduction are listed as follows:

- Costs of holding conferences to discuss and promote the usage of environmental protection equipment;
- Market survey costs of environmental equipment;
- Costs of market consultation services for environmental equipment;
- Costs of equipment display in exhibitions such as cost of space rent, cost of equipment transportation, cost of supporting facilities for exhibition;
- Costs of public relations activities such as sponsoring for education, health care institutions.

6 AVAILABLE SUPPORTS FOR FINNISH COMPANIES

If Chapter 5 finds out the investment conditions and incentives given by the Vietnamese government, Chapter 6 studies the supports from the Finnish government point of view. In order for an internationalization decision to be made, it is important to study the supporting factors. Very often, there are a lot of potentials to be fulfilled in the target market, yet the company does not have enough financial resources to pursue the potential. Therefore, the author has designed this chapter, especially for assisting the company with this need.

The objective of this chapter is to give Case Company further information on different financing/supporting tools that help Finnish companies to go abroad. As previously mentioned in the thesis framework, this chapter corresponds with factor E, the last factor of the external forces. The list of questions and deliverables for this factor is given in the following Table 25.

TABLE 27. Finnish supports questions and deliverables.

Supporting factors		**Deliverables**
1.	What are the relevant organizations that offer support for internationalization	Overview of Finnpartnership and Concessional Credits by Finnish Ministry of Foreign Affairs.
2.	What are the requirements for the supports?	Key notes on requirements by Siv Ahlberg, program director of Finnparnership.
3.	How much/ how many percents can the company receive from the support?	Lists of target countries/ industries and corresponding support percentages, estimations of the procedure/ time required for support decisions.

6.1 Finnpartnership

Finnpartnership is the official name of the Finnish Partnership Program financed by the Finnish Ministry of Foreign Affairs and managed by development finance institution Finnfund. Since 2006, Finnpartnership has assisted hundreds of companies in expanding their business and connections in developing countries. Three services are provided free of charge in Finnpartnership, namely, Advisory Services, Support Facility and Matchmaking. (Ahlberg 2010.)

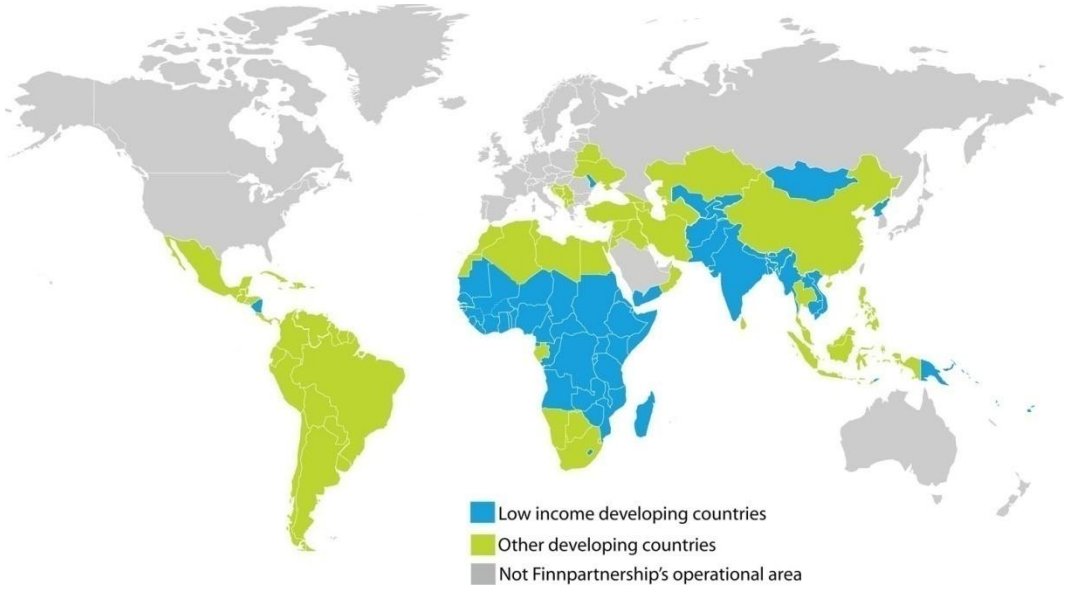


FIGURE 15. Finnpartnership area of operation (Finnpartnership 2010).

Figure 15 illustrates Finnpartnership's operation areas. As can be seen from the figure, Vietnam belongs to the group of low income developing countries, which receive a high rate of support. Environmental business is one of the focus points in Finnpartnership's support decision. Thus, this program is very relevant to Case Company.

According to Ms. Siv Ahlberg, Finnpartnership Business Support Program is available for Finnish actors – companies registered in Finland or elsewhere that have a substantial link to Finland. The projects should be economically sustainable; developmental effects are also emphasized in the evaluation of applications.

The maximum amount of grant for one project is EUR 250.000 and this grant can be applied during several phases of the project. Table 26 gives the different rates of support applied in different situations.

TABLE 28. Finnpartnership support rates.

Applicant/ Coverage amount	**Low income developing countries**	**Other developing countries**
Maximum grant amount	EUR 250.000	EUR 250.000
SMEs and other small organizations	**70%**	50%
Other companies	50%	30%

As mentioned in the previous paragraphs, Vietnam belongs to the group of low income developing countries. Thus, the percentage of grant can be acquired from Finnpartnership is 70%. This grant covers a part of the expenses incurred in the setup phases of a project. Examples of the expenses are those that relate to identifying business partners in a developing country, pre-feasibility and feasibility study expenses, business plan preparation expenses, travel costs to the target country by the applicant's personnel and external experts, etc. (Ahlberg 2010.)

Applications for the support can be submitted by filling in a specific application from Finnpartnership official website (www.finnpartnership.fi). A Support Facility Committee assesses each application and gives indicative decision, in principle, in two to four weeks from registration. Next, the Finnish Ministry of Foreign Affair approves the proposal and Finnfund follows to conclude an agreement with the applicant. The support is paid after the costs have incurred against a payment request that includes an auditor's statement. Appendix 2 gives examples of approved projects in 2009 and the amount of support paid to the projects. (Ahlberg 2010.)

It is important to note that in order to be qualified for supports from Finnpartnership, Case Company must use an approach to the Vietnamese market in which a

long term partnership is formed as a result. In the case of direct export or selling to the government, however, Case Company should use a totally different support provided by the Finnish Ministry of Foreign Affairs – Concessional Credits.

6.2 Concessional Credits

Concessional Credit is an export credit, which is supported by an interest subsidy. The interest subsidy is paid out of Finland's development co-operation budget. The recipient of the credit pays no interest. The objective of the concessional credit scheme is to promote economic and social development in developing countries by making use of the experience and technology possessed by Finnish companies. (Embassy of Finland 2010.)

The Finnish concessional credits program in Vietnam started in 1995 and has concentrated so far in the four following sectors: Water and Waste Water Treatment and Environment, Transportation and Health care and Energy. Currently, the program has six completed projects in water, energy and health care and 22 projects in various stages of preparation. (Embassy of Finland 2010.)

While Finnpartnership supports projects with a business to business nature, Concessional Credits are dedicated to mostly business to government projects. Therefore, these projects are usually bigger in size and also require longer time for decision (around one year) and a much bigger amount of paper work than Finnpartnership projects do. In order to be qualified for Concessional Credits, a project must fulfill the demand for Finnish interest (Embassy of Finland, 2010). This suggests that Finnish MFA only approves projects in which Finnish know-how and technology bring added value to the partner country's development (Ibid.).

The reason why Concessional Credit is relevant for Case Company to study is the nature of potential customers in the Vietnamese market. The government of Bac Ninh, where most of Vietnamese small-sized paper mill situate, for example, has a noteworthy prospect. In the following paragraphs, key principles of Concessional Credits are given.

Key principles of Concessional Credits:

- The decision on interest subsidy for a concessional credit is made by MFA.
- The concessional credit is guaranteed by Finnvera.
- The financier (bank) is in charge of the loan negotiations and signing of the loan agreement. All banks operating in the European Economic Area can act as financier.
- The financier is chosen by the exporter.
- The State Treasury takes care of the disbursement of the interest subsidy.
- Credit amount: 100 % of the contract amount
- Repayment period: 15 years
- Grace period: 3,5 years (interval from the starting point of credit to the first repayment)
- Interest rate 0 %, installments semi-annually. (Embassy of Finland, 2010).

With this supporting tool provided by Finnish MFA, Case Company can expect to turn commercially non-viable projects into viable ones. Waste water treatment for Bac Ninh Pulp and Paper Craft Village is an example of a commercially non-viable project. However, as this project would bring vast improvements to the living conditions of millions of people in Bac Ninh and the surrounding regions, there is a big chance that Concessional Credits be provided. As a result, projects which worth millions of Euros can be divided into smaller installments that are payable by the Bac Ninh government, while Case Company can already receive a lump-sum by the financier at the beginning of the repayment period.

7 CONCLUSION

No matter how big and experienced a company is, the decision for the company to enter a new market is never an easy one to make. Prior to deciding, the company has to consider many different factors, internal and external ones. This thesis is thus made to assist Case Company in making that decision. The author understands that there are still many more aspects need to be studied by Finpro and Case Company in order for the decision to be thoroughly finished. Nevertheless, the author provides her own recommendations for the research question proposed in the beginning of the thesis in the following subchapters.

7.1 Go/No Go decision

In the following Figure 16, the thesis framework is brought up once again for reviewing purposes. The internal and external forces that have been studied in this thesis are then briefly reviewed. Suggestions follow to give an answer for the internationalization decision from the author's point of view.

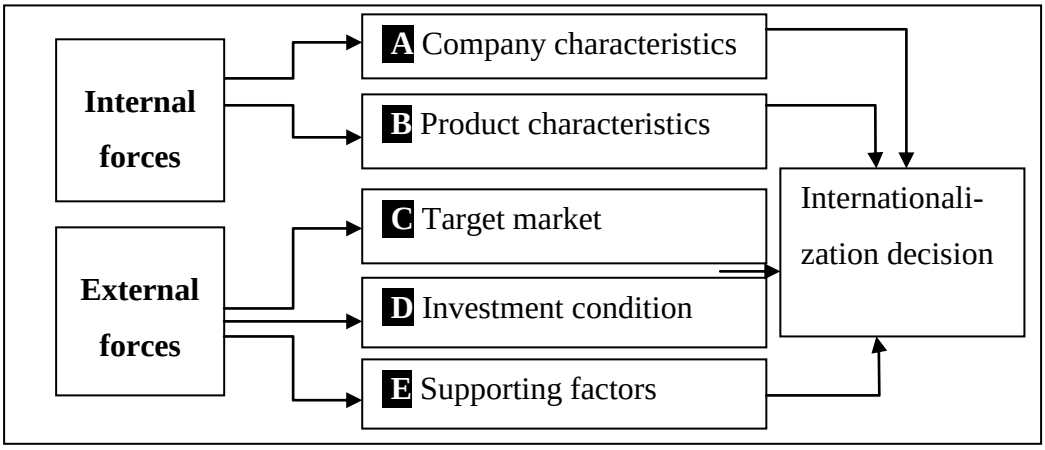


FIGURE 16. Thesis framework review.

When internal forces such as company and product characteristics are taken into consideration, the company's main strength is its strong background and references. Even though the Case Company itself is not so well known in Vietnam, its customers such as UPM and Stora Enso are known worldwide; this gives the company a very credible image. Case Company's products, in addition, are of

excellent quality and are made to withstand extreme weather conditions; this is another plus point.

On the other hand, Finnish made products are yet a strong selling point in Vietnamese point of view; this is one of the weaknesses of the Case Company's offerings, not to mention Case Company's inexperience in Vietnamese WWT market. Furthermore, Case Company's WWT systems require a lot of spaces and initial investment cost; these might hinder Vietnamese decision makers from their purchasing decision.

Nevertheless, external forces show favorable conditions for Case Company to enter the market. External forces such as market characteristics, investment conditions and supporting tools all prove 2010 to be a good year for WWT industry in Vietnam.

First, the target market, specifically WWT market for pulp and paper industry is growing at a fast rate. Despite the short term economic slowdown in 2008 and the declining trend of printing paper industry, packaging industry is blooming in Vietnam, which creates more demand for WWT systems. Large sized paper companies and corporations in Vietnam such as Tan Mai and VINAPACO are racing in their outputs and expansion rates; not to mention VINAPACO's coming IPO that will bring the corporation a huge amount of investing power.

Second, investment conditions also show encouraging signs as many new incentives by the Vietnamese government are in effect from 2010. Tax incentives and many other incentives show the government's commitment in fighting climate change and keeping a sustainable economy. New moves of the government to strengthen the ability of Vietnamese Environmental Police and to renew WWT standards are also worth noticing.

Last but not least, supporting tools from Finland are very relevant and helpful for Case Company in this specific internationalization decision. Finland has long been one of the most active countries in fighting poverty and climate change in Vietnam through Concessional Credits projects. From 2006, Finnpartnership

joined in to support long term business connections between the two countries. Even though Concessional Credits and Finnpartnership support projects of very different nature, Case Company's industry and target market are relevant for both tools to be utilized.

All in all, the author finds the answer to the question: "Should Case Company enter the Vietnamese market?" very positive. Given that the other aspects of internationalization are favorable, it will be a definitely YES. Therefore, suggestions on "How should Case Company enter the market?" are to be given in the coming sub chapter.

7.2 Recommendations

In the market characteristic chapter, three groups of customers have been studied. The results given show that the most potential groups of customers are the large sized paper companies and the concentrated group of small sized paper mills in Bac Ninh province, Hanoi. With a different group of customers, different approach should be used as well as different type of supports is applied. In the following Figure 17, two options targeting two most potential groups of customers are given.

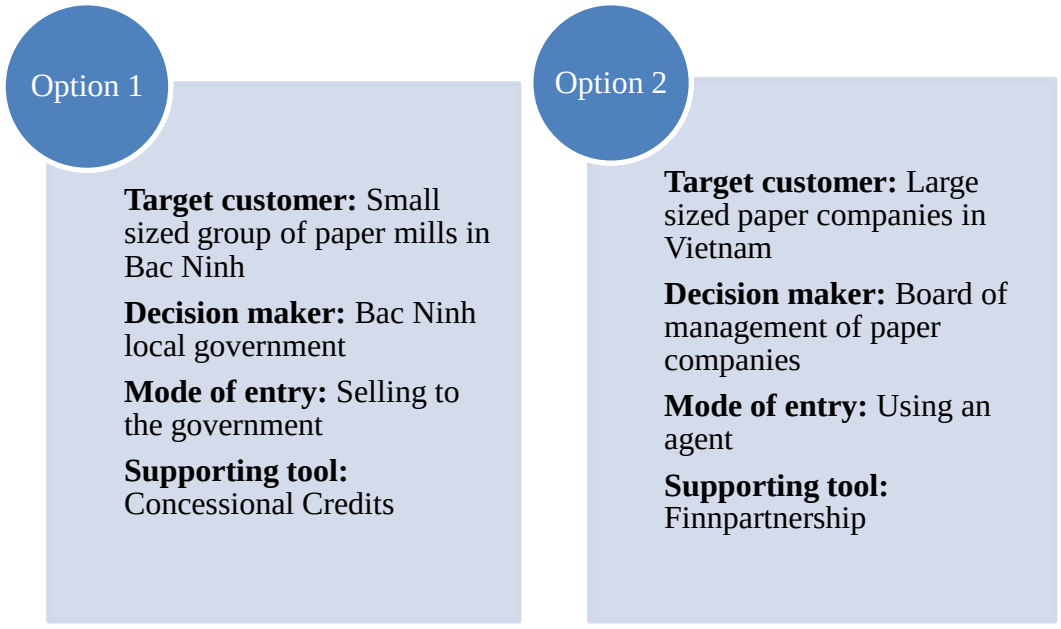


FIGURE 17. Two options for internationalization.

7.2.1 Option 1

Target customers: As mentioned in Figure 17, the end user of Option 1 is the groups of paper mills in Phong Khe, Bac Ninh. There are altogether six clusters of small sized paper mills in Bac Ninh province as in Table 29.

Decision maker: The officials who take decisions to build concentrated WWT plant in clusters and IZs of Bac Ninh are the Bac Ninh local government, Bac Ninh Department of Planning and Investment and Bac Ninh Department of Natural Resources and Environment. The contact information of Bac Ninh local official is given in Table 29.

TABLE 29. Target customers and decision makers in option 1.

Decision makers		
Bac Ninh local government: Mr. Tran Van Tuy (Chairman) No. 10, Phu Dong Thien Vuong, Suoi Hoa, Bac Ninh **Bac Ninh Department of Natural Resources and Environment:** Mr. Nguyen Tu Quynh No. 188, Nguyen Gia Thieu, Bac Ninh. Tel: +84.241.810198 **Bac Ninh Department of Planning and Investment:** Mr. Nguyen Duc Le No. 06, Ly Thai To, Bac Ninh Tel: +84.241.822569 Email: khdt@bacninh.gov.vn		
Target customers' locations	**Number of plants**	**Volume (m3/day)**
Phong Khe Indutrial Cluster	52	800
Ben Hamlet - Duong O Village	43	650
Cau Tien Industrial Cluster	12	175
Dao Xa Village	28	250
Cham Khe Village	8	150
So and Sau Dong Hamlets	32	280

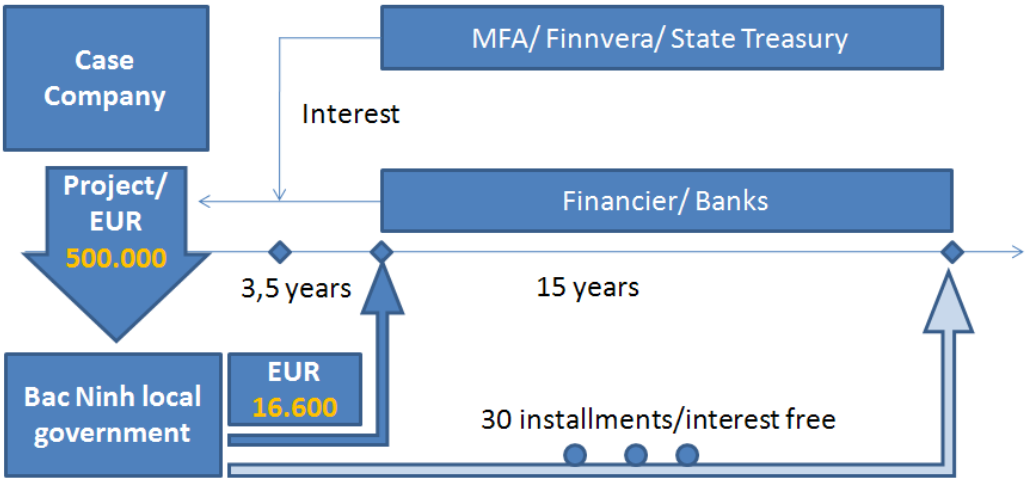


FIGURE 18. Simplified example of Bac Ninh project using Concessional Credits.

Supporting tool: Figure 18 explains the simplest case of a WWT project for Bac Ninh local government using Concessional Credits. In this case, the total value of the WWT project offered by Case Company is EUR 500.000, if Concessional Credit is granted in this situation, Bac Ninh government will have to pay 30 installments in 18,5 years, each worth EUR 16.600 for the borrowing bank, interest free.

Key to success: In real business practice, Concessional Credits process is much more complicated than illustrated in Figure 18, and the equipment supplier might not be chosen in advance. Therefore, the Case Company must be very active and patient in order to initiate and/or win a project of this type. The key to winning government contracts includes a high degree of involvement and communication between Case Company and relevant government entities. Interaction should begin during the project planning stage, preferably with the help of Finpro and Finnish embassy in Hanoi.

In order to secure orders in competitive bidding, it is necessary to establish rapport and credibility, as well as to educate the procuring entity as to how the product or service can support project needs well before the bid is publicly announced. Although the timing for tender opening, bid closing and award notification varies from project to project, preparation of government budgets generally

occurs between June and October, with actual purchases often made in December and January.

Experienced foreign suppliers caution that even after awards are made, negotiations on price, specifications, payment terms, and collateral may continue for some time. In local government-funded projects like WWT for Bac Ninh, contracts are commonly awarded to those who can offer "appropriate" price, "decent" quality and have "strongest connections" with project developers, and are more frequently awarded as direct contracts rather than open competitive bidding.

7.2.2 Option 2

Target customer: Large sized paper companies in Vietnam as listed in Table 30.

TABLE 30. Potential customers of option 2.

Name	Website/ Contact information	Level of potential	Main reason(s)
Tan Mai JSC	www.tanmaipaper.com	High	High expansion rate (200%) Environmental friendly image
VINAPACO	www.vinapaco.com	Medium-High	High expansion rate (26%) Recently IPO Leading corporation image
Viet Tri JSC	Thanh Mieu, Viet Tri, Phu Tho.	Medium	Bad environmental publicity Environmental fine by VEP
Sai Gon JSC	www.saigonpaper.com	Medium-Low	Potential expansion in 2011

Decision maker: Board of management of paper companies

Mode of entry: Using an Agent. If the keys to success in Option 1 lie in direct contact and effective communication between Case Company and local officials,

the keys to success in Option 2 are a good agent and mutual support between Case Company and its agent. The ideal agent must have good understanding of the WWT treatment market, as well as established connection with target customers. The agent should not have too many businesses to avoid resource scattering.

Supporting tool: Finnpartnership

Key to success: Since the agent is the one who directly sells the products/systems in Vietnamese market, choice of agent should be made with special care. Lists of potential partners are already given in Table 21 and 22 of this thesis. These lists should be refined by Finpro's analysts, interviewed and shorten before a short list is formed. After that, Case Company should have direct meeting with the short listed agents before making a final decision.

The right of design and implementing the product/system marketing plan in Vietnam stays with Case Company's agent. However, there are some suggestions made in this thesis for Case Company and its agent regarding marketing actions and responsibilities.

Suggestions for coordination between Case Company and its agent:

Promotion

Case Company should have a well-planned marketing in joint efforts with its agent. For example, Case Company commercials should be translated and reprint, which should be redesigned to suit Vietnamese condition. The agent can also make agreements with Case Company to share costs of marketing communication in suitable circumstances.

In addition, Case Company should actively market itself to some key clients together with its agent; provide Case Company commercial and promotional literature to the agent. Regarding big projects that diplomatic assistance is needed, it is possible to arrange meeting with Finnish ambassador in Hanoi.

Case Company's agent is expected to participate in major related exhibitions in Vietnam (e.g VietWater events 10 Nov 2010). Further information about this annual event for water and waste water industry can be found in Appendix 3. Since the target customers as Case Company is usually from large sized pulp and paper companies, it is essential to be present at VPPA events. The agent should be very active in these events, since Case Company will not be directly involved. However, consultancy and planning can be done in the cooperation of both sides. Partly financial support can be expected from Case Company and Finnpartnership.

In addition to the Water and Waste Water trade fair, annual workshops are suggested as Case Company is not yet a very famous name in Vietnam. Appropriate invitees are expected, such as government officials, pulp and paper companies' managers, architects and construction consultancies. Partly financial support can also be expected from Case Company and Finnpartnership. In addition, the agent can expect a markdown in corporate Tax from these events according to the new incentive given by the Vietnamese government.

There are more and more managers, constructions advisors and architectures go online for product information in Vietnam nowadays. Thus, the agent is advised to make the best of the Internet for product introduction, an effective website is that of Vietnam Pulp and Paper Association, which has more than 100 member companies.

Prospecting & Proposition design

Case Company should offer backup such as technical advice and support to partner when needed, give received business leads to the agent for screening Case Company offers to partner only. Price should be consulted with the agent beforehand.

The agent is expected to be active in the market and visit the plants regularly, has a good network in the market to get first hand leads and is willing to learn professional marketing skills and improve technical level.

Personal selling should be considered most important as the target customers are very high profile. Salesmen should know the right contact, which info is needed, and the technical data involved. Training of salesmen can also be arranged together with Case Company. It is useful to note that Finnpartnership also offer support for training of this type.

Pitching for sales & Project implementation

Pitching is the agent's responsibility. However, Case Company is expected to give adequate support to both customer and the agent when needed. Expamle of supports are direct contact with the Finnish technical department for help and/or reference plant visits to Finland for qualified prospects. Full supporting documents and information should be sent and/or presented to potential customers such as managing director of Tan Mai, VINAPACO, paper mill architecture or construction consulting companies.

Moreover, the agent should have a team specialized in assembling, construction and technical consultation. Technical skills needed for after sale services are also crucial for keeping a good image of Case Company's offerings.

The pricing decision stays with the company. However, price structure and the Agent's share of the profit should be mutually agreed in advanced. The agent should also be able to conduct relevant information search of relevant customers' credit history to avoid the risk of non-payment.

7.3 Possibilities for future research

To conclude, the author would like to mention some possibilities for future research. There are three main possibilities: further research on a feasible agent for Case Company, research on possible applications of Concessional Credits to other craft villages in Vietnam, and research for local assembly potential in Vietnam.

Firstly, as mentioned previously in this thesis, there is still much more information needed to complete this assignment from Finpro point of view. However, the au-

thor believes that the data provided in this thesis are helpful for the coming work of Finpro's analysts. Regarding the option of using an agent in Vietnam, the long list offered in Tables 21 and 22 of this thesis has been carefully collected, and would provide a good starting point for Finpro's interviews.

Secondly, within the thesis working process, the author has found out many potentials of using Concessional Credits for other craft villages in Vietnam. This opens another option for future research. As there are still more than 50 million Vietnamese who are living in rural areas, the fierce rate of industrialization has strongly affected the villages' environment as well as the people living there. As a result, the government has been paying more attention to environmental problems of craft villages and Concessional Credits offer a helping hand to fight the problems.

Thirdly, local assembly is also a possibility of future research that should be looked into. As local wages of Vietnamese engineers and workers are significantly lower than that of Finnish employees, local assembly offers chances to make WWT affordable for even more people. At this stage of business, Case Company can look into other groups of customers such as the scattered small and medium sized companies, newly built IPs and IZs, or other customers in the surrounding countries.

To sum up, there are many possibilities of expanding and improving once Case Company makes its first step in Vietnam. The author strongly believes that the Vietnamese WWT market has a lot of potentials. With the supports given by Finnish government, the willingness of Vietnamese government and especially the commitment to internationalize of Case Company, these potentials are sure to be turned into real business opportunities.

8 SUMMARY

The goal of this thesis is to assist Case Company, a Finnish WWT treatment company in its decision to go to the Vietnamese market and to give relevant recommendations for the company to be successful in the market. Two main parts of the thesis have been written in order to achieve this goal.

The first part of this thesis is the theoretical framework. This part deals with various sources of literature concerning internationalization decision making. The objective is to find out the relevant information needed prior to going abroad. Two models of and two analyzing tools are used to form the thesis framework. The models consist of the Cavusgil & Zou model of export marketing strategies and performance and the model of Darling and Seristo. The tools used are SWOT and Mc Kinsey 7S. The models and tools are then combined to form a framework of internal forces and external forces.

The second part of the thesis is the empirical part. This part seeks to answer the questions provided in the empirical part. These questions concern internal forces questions about Case Company and its products, and external forces questions of market, investment conditions in Vietnam and supporting tools from Finland.

First, internal forces questions concerning Case Company and its products are answered using Mc Kinsey 7S and SWOT. This thesis does not go into internal details of the company, still it suggests the Case Company to conduct a thorough internal forces evaluation on its own prior to making the decision to go abroad.

Second, external forces questions related to the Vietnamese WWT market, current investment conditions and supporting tools are answered using thorough desk research and in depth interviews with professionals in environmental business. The market of WWT treatment for pulp and paper industry is studied in details. Names and addresses of potential customers, competitors as well as potential business partners are given.

Furthermore, investment condition and supporting tools give much important information for the decision to go to Vietnam. The most popular modes of entry being used by international WWT companies in Vietnam are studied in investment condition part. Latest laws and regulations on tax incentives given by the Vietnamese government are also provided. In the last component of external forces, supporting tools given by the Finnish government are studied. These tools, namely Concessional Credits and Finnpartnership, provide very valuable financial supports for Finnish companies to go abroad.

To conclude, recommendations are given with a very positive answer for the prospect of Case Company going to Vietnam. In this part, the author provides two options for Case Company to consider. The first option is to utilize Concessional Credits to sell WWT system to the Bac Ninh local government. The second option is to find a local agent with established connections in Vietnamese WWT market to sell Case Company's products. The options also open many different possibilities for future research.

REFERENCES

Published references

Cavusgil, S. & Zou, S. 1994. Marketing strategy performance relationship. Journal of Marketing. Vol. 58, 1-21.

Daniels, J., Radebaugh, L. & Sullivan, D. 2007. International business environments and operations. 11th edition. New Jersey. Pearson Education Ltd.

Darling, J. & Seristö, H. 2004. Key steps for success in export markets. European Business Review. Vol. 16 No. 1, 28-43.

Gray, D. 2009. Doing Research in the Real World. 2nd edition. London. SAGE publications Ltd.

Harvard Business Essentials. 2006. Marketers' toolkit. The 10 strategies you need to success. Boston, Massachusetts. Harvard Business School Press.

Hollensen, S. 2007. Global marketing. 4th edition. London. Pearson Education Ltd.

Kotler, P. Keller, K. Ang, S. Leong, S. Tan, C. 2009. Marketing Management. An Asian perspective. 5th edition. Singapore. Pearson Education Ltd.

Miller R. 1998. Selling to Newly Emerging Markets. Westport, CT, USA. Greenwood Publishing Group.

Morgan, N., Zou, S., Worhies, D.W. & Katsikeas, C. 2003. Experiential and informational knowledge, architectural marketing capabilities, and the adaptive performance of export ventures: a cross national study. Decision Sciences. Vol. 34 No. 2, 287-321.

Nguyen, B. 2008. Industrial waste water treatment for recycling, purification and resale in Vietnam. Lahti University of Applied Sciences.

O'Cass A. & Julian, C. 2003. Examining firm and environmental influences on export marketing mix strategy and export performance of Australian exporters. European Journal of Marketing. Vol. 37 No. 3/4, 366-384.

Phong Khe Commune People Committee 2006. Report on the Paper Production Situation in Phong Khe, Bac Ninh, Vietnam.

Richey, R. & Myers, M. 2001. An investigation of market information use in exportchannel decisions antecedents and outcomes. International Journal of Physical Distribution & Logistics Management. Vol. 31 No. 5, 334-353.

Saunders, M. Lewis, P. & Thornhill, A. 2009. Research methods for business students. 5th edition. Harlow. Pearson Education Ltd.

Souchon, A. & Diamantopoulos, A. 1998. Export information acquisition modes: measure development and validation. International Marketing Review. Vol. 16 No. 2, 143-168.

Tesfom, G. & Lutz, C. 2006. A classification of export marketing problems of small and medium sized manufacturing firms in developing countries. International Journal of Emerging Markets.Vol. 1 No. 3, 262-281.

Wall, S. Minocha, S. Rees, B. 2010. International business. 3rd edition. Essex, England. Pearson Education Ltd.

Westwood, J. 2006. How to Write a Marketing Plan. 3rd Edition. London, GBR. Kogan Page Ltd.

Whitelock J. 2002. Theories on internationalization and their impact on market entry strategies. International Marketing Review. Vol 19 No. 4, 342-347.

Williams, J. 2006. Export marketing information-gathering and processing in small and medium-sized enterprises. Marketing Intelligence & Planning. Vol. 24 No. 5, 477-492.

Unpublished references

Hassinen V. 2009. Case Company Presentation. Helsinki

Electronic references

AlfaLaval 2010 [referenced 01 Mar 2010]. Available at: http://www.alfalaval.com/Pages/default.aspx

Asenco 2010 [referenced 10 Jan 2010]. Available at: http://asenco.com.vn

Asiatech 2010 [referenced 09 Mar 2010]. Available at: http://www.asiatech.com.vn/tech/tech_detail.php?tech_id=6

Bacninh 2009 [referenced 19 Feb 2010]. Available at: http://www.bacninh.gov.vn/Story/KinhTeKinhDoanh/ThuongHieuNoiTieng/2009/12/20203.html

Baomoi 2010 [referenced 17 Feb 2010]. Available at: http://www.baomoi.com/Info/Nam-2010-Tong-Cong-ty-Giay-Viet-Nam-phan-dau-tieu-thu-tang-24/45/3797868.epi

Baophutho 2010 [referenced 17 Feb 2010] Công ty cổ phần Giấy Việt Trì. Available at: http://www.baophutho.org.vn/baophutho/vn/website/kinh-te/100CFBA5B52/2010/11/122A55DD8FB/

Business dictionary 2010 [referenced 31 Jan 2010]. Available at: http://www.businessdictionary.com

Canhsatmoitruong 2009, a. [referenced 19 Feb 2010]. Available at: http://www.canhsatmoitruong.gov.vn/default.aspx?tabid=439&ID=1946

Canhsatmoitruong 2009, b. [referenced 19 Feb 2010]. Available at: http://www.canhsatmoitruong.gov.vn/default.aspx?tabid=439&ID=1868

Cawatech 2010 [referenced 10 Jan 2010]. Available at: www.cawatech.com.vn

Co Mac T 2007 [referenced 31 Jan 2010]. Available at: http://www.buyusa.org

Cocomo 2010 [referenced 10 Jan 2010]. Available at: http://cocomo-vn.com

CP4BP official website 2009 [referenced 16 Feb 2010]. Available at: http://www.cp4bp.org/site/index.php?option=com_content&view=article&id=86%3Asn-xut-sch-hn-nganh-giy-c-hi-tit-kim-cho-doanh-nghip&catid=1%3Anews&Itemid=27&lang=en

Dongnai 2010 [referenced 16 Feb 2010] Công ty cổ phần tập đoàn giấy Tân Mai khởi động 4 dự án lớn với tổng vốn đầu tư gần 150 triệu USD. Available at: http://www.dongnai.gov.vn/cong-dan/20090330.215/mlobject_print_view

Dongvinh 2010 [referenced 10 Jan 2010]. Available at: www.dongvinhgroup.com

Ducphat 2010 [referenced 10 Jan 2010]. Available at: http://xulynuoc.net

Embassy of Finland, 2010 [referenced 19 Mar 2010]. Available at: www.finland.org.vn

Finnpartnership official website 2010 [referenced 19 Mar 2010]. Available at: http://www.finnpartnership.fi/default.asp?docId=12620

Finpro official website 2010 [referenced 19 Jan 2010]. Available at: http://www.finpro.fi/en-US/About+Finpro/

GSO 2010. General Statistics Office of Vietnam. Available at: http://www.gso.gov.vn/default.aspx?tabid=391&idmid=3&ItemID=8935

Haithu 2010 [referenced 10 Jan 2010]. Available at: www.haithu.com.vn

Hiendaihoa 2008 [referenced 19 Feb 2010]. Available at: http://www.hiendaihoa.com/environment_detail.php?id=230

Hungphuong 2010 [referenced 10 Jan 2010]. Available at: www.hungphuong.com.vn

Kroftaengineering, 2010 [referenced 01 Mar 2010]. Available at: http://www.kroftaengineering.com/index.html

Lesprom 2010 [referenced 17 Feb 2010]. Available at: http://wood.lesprom.com/news/37932/

Mindtools 2010 [referenced 30 Jan 2010]. Available at: http://www.mindtools.com/pages/article/newSTR_91.htm

NetMBA 2010 [referenced 10 Feb 2010]. Available at: http://www.netmba.com/marketing/market/segmentation/

Processingtalk 2010 [referenced 01 Mar 2010]. Available at: http://www.processingtalk.com/news/alv/alv156.html

Saigonpaper 2010 [referenced 17 Feb 2010]. Available at: http://www.saigonpaper.com/w.php?id=3&mt=251

SGGP 2008 [referenced 19 Feb 2010]. Available at: http://www.sggp.org.vn/moitruongdothi/2008/6/157045/

Siemens 2010 [referenced 02 Mar 2010]. Available at: http://www.siemens.com/about/en/worldwide/vietnam_1154696.htm

Tanmai 2010 [referenced 16 Feb 2010]. Available at: http://www.tanmai.com.vn/index.php?option=com_content&view=article&id=48&Itemid=53

Thai Ministry of Foreign Affairs 2010 [referenced 17 Feb 2010]. Available at: http://www.mfa.go.th/web/2645.php?id=23836

Tintuc.xalo 2010 [referenced 02 Mar 2010]. Available at: http://tintuc.xalo.vn/00-1371428058/cong_nghe_xu_ly_nuoc_thai_hieu_qua_cao.html

Vanlang 2010 [referenced 10 Jan 2010]. Available at: www.vlc.vn

Vfei 2009 [referenced 19 Feb 2010]. Available at: http://www.vfej.vn/vn/chi_tiet/20501/cong_ty_giay_thanh_loi_de_nuoc_thai_hoa_chat_chay_ra_song

Vietfilter 2010 [referenced 10 Jan 2010]. Available at: www.vietfilter.vn

Vietnamplus 2009, a. [referenced 19 Feb 2010]. Available at: http://www.vietnamplus.vn/Home/Cong-ty-giay-xa-nuoc-thai-gay-o-nhiem-song-Ma/20098/13475.vnplus

Vietnamplus 2009, b. [referenced 19 Feb 2010]. Available at: http://www.vietnamplus.vn/Home/TPHCM-Bat-qua-tang-cong-ty-giay-Hao-Nam-xa-thai-chua-qua-xu-ly/200811/1070.vnplus

Vietnamxanh 2010 [referenced 11 Jan 2010]. Available at: www.vnxanh.com

Vietnhat 2010 [referenced 11 Jan 2010]. Available at: www.vietnhat.net

Vinapaco 2010 [referenced 17 Feb 2010]. Available at: http://www.vinapaco.com/

Vntrades 2010. Khánh thành nhà máy giấy lớn nhất Việt Nam [referenced 14 Feb 2010]. Available at: http://www.vntrades.com/tintuc/name-News-file-article-sid-50786.htm

VPPA 2010 [referenced 19 Feb 2010]. Available at: http://www.vppa.vn

Viwase 2010 [referenced 11 Jan 2010]. Available at: www.viwase.vn

Wacocorp 2010 [referenced 10 Jan 2010]. Available at: www.wacocorp.com

Xalo 2008 [referenced 17 Feb 2010]. Available at: http://tintuc.xalo.vn/00604788041/buc_xuc_o_nhiem_moi_truong_cua_nha_may_giay_bai_bang.html

Laws, statutes, decrees

04/2009/ND-CP. Vietnamese Government. Hanoi 14 Jan 2009.

230/2009/TT-BTC. Ministry of Finance. Hanoi 08 Dec 2009.

72/2006/ND-CP. Vietnamese Government. Hanoi 25 Jul 2006.

QCVN 24: 2009/BTNMT. Ministry of Natural Resources and Environment. Hanoi 16 Nov 2009.

TCVN 5945:2005. Ministry of Science and Technology. Hanoi 29 Nov 2005.

TCVN12:2008/BTNMT. Ministry of Natural Resources and Environment. Hanoi 2008.

List of interviews

Ahlberg, S. 2010. Program Director. Finnpartnership. Interview 02 Feb 2010.

Dang, H. 2009. Managing Director. RCEE Ltd. Interview 20 Oct 2009.

Do, K. 2010. Technical Manager. IVA Vietnam. Interview 10 Jan 2010.

Kieu, P. 2010. Senior Consultant. Finpro Vietnam. Interview 19 Jan 2010.

Luong, H. 2010. Secretary. Finpro Vietnam. Interview 09 Mar 2010.

APPENDIX 1. WWT system for small sized Pulp & Paper mills (Asiatech 2010).

Technique – economic targets:
- After handling, the water meets Vietnam Standard 5945-1995, Type B
- Pulp can be collected to recycle.
- Waste water can be recycled
- Unit price: 1,200 VND/m^3 to 1,500 VND/m^3

Capacity: 60 m^3/day.night to 500 m^3/day.night
Meeting VIETNAM STANDARD, Foreign standard

Application of Technology and Equipment:
- Handling waste water in the paper branch

Advantages of the equipment:
- Made from steel, it can be disassembled when moving.
- There is an anti-erosion EPOXY paint inside, expand the using time.
- Controlled automatically, to avoid the direct contact with the poison
- The square occupies about 50% in compare with the traditional technique (the tank made from cement)
- Low operating and handling fees.
- Short executing time..

Development of technical equipment:
- Having sold and deployed for the factories…

Copyright:
- Trade mark

Front-end requirements:
- Employee resource: 01 pax to 02 pax depending on the capacity
- Factory: 40 m^2 to 200 m^2
- Materials: neutralized, reactive chemical, deposit supporting chemical

Hand over technique method:
- On the agreement with customers

Technique supplies:
- Complying with the contract
- Carrying out on the orders

Offers (for reference only):
- Price of equipment: 200 million to 800 million VND
- Training fee: free of charge
- Instruction in details: free of charge
- Technical support: free of charge
- Warrantee: 12 months

APPENDIX 2. Finnpartnership's allocation of supports in 2009 (Ahlberg, 2010).

Industry	Company size	Status	€
Construction	SME	1) Application received and registered	0.00
Other	SME	1) Application received and registered	0.00
Metal and industry engineering	SME	1) Application received and registered	0.00
Energy	SME	1) Application received and registered	0.00
Information and communication technology	SME	1) Application received and registered	0.00
Forestry, wood and paper	SME	1) Application received and registered	0.00
Environment	SME	11) All expenses settled	140,000.00
Manufacturing engineering and machinery	Large	11) All expenses settled	14,000.00
Textiles and clothing	SME	11) All expenses settled	9,323.00
Energy	SME	11) All expenses settled	40,262.00
Manufacturing engineering and machinery	Large	11) All expenses settled	50,494.00
Construction	Large	11) All expenses settled	109,793.00
Environment	Large	11) All expenses settled	138,929.00
Environment	Large	11) All expenses settled	138,929.00
Forestry, wood and paper	SME	11) All expenses settled	46,276.00
Forestry, wood and paper	SME	11) All expenses settled	119,056.00
Forestry, wood and paper	SME	11) All expenses settled	74,851.00
Environment	Large	11) All expenses settled	22,440.00
Information and communication technology	Large	11) All expenses settled	39,610.00
Rubber and plastics	Large	11) All expenses settled	23,250.00
Information and communication	SME	11) All expenses settled	64,988.00

technology			
Forestry, wood and paper	Large	11) All expenses settled	250,000.00
Other	Large	11) All expenses settled	40,550.00
Health and pharmaceutical	SME	8) Agreement signed	67,312.00
Construction	SME	8) Agreement signed	34,958.00
Other	SME	8) Agreement signed	15,451.00
Metal and industry engineering	SME	8) Agreement signed	19,099.00
Information and communication technology	Large	8) Agreement signed	23,110.00
Manufacturing engineering and machinery	SME	8) Agreement signed	33,614.00
Other	SME	8) Agreement signed	14,000.00
Other	Large	8) Agreement signed	9,277.00
Environment	SME	9) Settlement request of incurred expenses	193,190.00
Environment	SME	9) Settlement request of incurred expenses	193,190.00
Agriculture and food processing	SME	9) Settlement request of incurred expenses	98,000.00
Chemicals	Large	6) Approved by Foreign Ministry	139,144.00
Metal and industry engineering	SME	6) Approved by Foreign Ministry	69,578.00
Manufacturing engineering and machinery	SME	4) Rejected by Finnfund committee	0.00
Forestry, wood and paper	SME	4) Rejected by Finnfund committee	0.00
Electrical engineering	Large	7) Rejected by Foreign Ministry	0.00
Construction	SME	7) Rejected by Foreign Ministry	0.00
Services	SME	7) Rejected by Foreign Ministry	0.00
Manufacturing engineering and machinery	Large	7) Rejected by Foreign Ministry	0.00
Fishery and fish products	SME	7) Rejected by Foreign Ministry	0.00

EUR 2,232,64.00

APPENDIX 3. Vietwater 2010 information and participation costs.

Date: 10 - 12 November 2010

Venue: Saigon Exhibition & Convention Centre, HCMC, Vietnam

Website: http://www.vietwater.com/ebrochure.html