

KEMI-TORNIO UAS

Product Analysis in Target Market
Potential of Chinese Electric Motorcycle in Southern Finland

Ye Jing

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ABSTRACT

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The thesis investigates potential of Chinese electric motorcycles in Southern Finland market through a product analysis. The objective of the thesis is to understand market situation and search market potential of Chinese electric motorcycles through a product analysis. The target market of the product analysis is southern Finland.

Product analysis is an analysis related to customers' needs. Literatures related to product development and marketing management are mainly used in philosophical part of the thesis, such as Innovation Management and New Product Development, Marketing Management. Research methods include two qualitative methods and one quantitative method: Interview, observation and document analysis. As an empirical research, interview, observation and document analysis are used to collect practical data and general statistics for China electric motorcycle product analysis. SWOT analysis of Chinese electric motorcycles is presented as a result in the thesis.

Potential market exists in southern Finland for Chinese electric motorcycles. Potential Chinese electric motorcycles for Finnish purchaser should cost less than 1000Euro - 1200 Euro which includes fee of certification and transportation and taxation. Black or dark color is popular color in southern Finland. Traditional outline and cool outline are welcomed. Readers can understand the opportunities and threats of Chinese electric motorcycles through the thesis. Therefore, the thesis can be a preparative search for a strategic plan of Chinese electric motorcycles.

Key Words: Product Analysis, Electric Motorcycle, Potential, Southern Finland

1 INTRODUCTION

1.1 Background and Motivation

Currently China is one of the biggest electric motorcycle producers in the world. Electric motorcycles are driven generally in Chinese large and small cities. However, I saw a different phenomenon in Finland. Electric motorcycles are not used. An idea, promoting Chinese electric motorcycles in southern Finland, emerged in my mind. Actually, promotion of Chinese electric motorcycles in southern Finland is a complicated work which requires large capital. As a bachelor student in majoring business management, I can contribute is by researching market potential for Chinese electric motorcycles.

The thesis attempts to research market potential of Chinese electric motorcycles in southern Finland. Product analysis is an initiative work of research market potential. The whole product analysis includes an internal analysis of Chinese electric motorcycles and an external analysis of southern Finland. The internal product analysis aims at investigating the price, quality and performance of Chinese electric motorcycles. The external product analysis focuses on competitor, customer and environment factors in southern Finland. The thesis also presents suggestions for promoting Chinese electric motorcycles in southern Finland.

Geographical factors and demographic factors made me choose Southern Finland as my target market. Southern Finland is mostly flat land from the perspective of geography. Electric motorcycle is a motoring product normally used on flat land. Furthermore, southern Finland owns high average population density. The average population of Finland is 17 inhabitants/km², which varies from over 120 in the industrialized south to between 2 and 3 in the sparsely populated regions of north.

(Facts about Finland 2009). People are one of the elements in marketing mix. High average population density is a probability to increase the number of customers.

As the name of electric motorcycle, an electric motorcycle is a kind of motorcycle using electric power. An electric Scooter, a similar product as electric motorcycle, is ideal for urban use, particularly because it is very quiet and it is pollution-free and extremely affordable (BBC News 2011). Because an electric motorcycle is not using fuels as its energy, an electric motorcycle can reduce air pollution, such as carbon monoxide, oxides of nitrogen and hydrocarbons (EPA Victoria 2011). Electric motorcycles can solve noise pollution. A customer using an electric motorcycle in New York gives positive feedback by stating that “I rode a bumpy block of Washington St., back and forth, on my silvery bike, its quiet engine purred like a kitten” (New York Daily News 2011). To sum up, electric motorcycle can be considered as a green vehicle.

In Finland, the demand for electric motorcycles is increasing substantially. In other words, 457 electric mopeds were registered at the end of 2010 and the growth has been relatively rapid, since at the end of 2007 the number of electric mopeds registered was only 84 (BBC News 2011). According to the BBC News above, I can deduce that there is an increasing number of people interested in electric motorcycles, despite the fact that electric mopeds represent a different category of vehicles.

In addition, most Finnish people have high environmental protection awareness. “Together with its Nordic neighbors, the country is a leading proponent of stricter international environmental standard and legislation in the European Union (EU) and other international arenas” (Embassy of Finland Ottawa 2011). The country referred to in this sentence is Finland.

Electric motorcycles can be one of profitable products in Finnish Market. The first reason is the increasing demands for electric motorcycles in Finnish market now days. Another reason is the green idea of electric motorcycle which matches with Finnish people's high environmental protection awareness exactly.

1.2 Objectives and Research Questions

The objective of thesis is to understand market situation and research market potential of Chinese electric motorcycles through a product analysis. The target market of the product analysis is southern Finland. The thesis is to explain potential types of Chinese electric motorcycles in southern Finland. The research addresses the main research question with two sub-research question.

Main research question is as follows:

How can market potential be researched through a product analysis?

The product analysis is a study to understand a product all-around in order to meet the exact needs of customers. In the product analysis, both internal information and external information are used to find out the strengths, weaknesses, opportunities and threats of the product. Expressing the strengths and opportunities and modifying weaknesses and threats make the product to be competitive in the target market. Market potential means a competitive product meets exact needs of customers in target market.

- Sub-research question:

What are the potential types of electric motorcycles in southern Finnish market?

The word "type" is a large area. It includes different elements of electric motorcycles, such as price, color and style. This sub research question is answered by the interview data and analysis of those data. The price, color and outline of electric motorcycles are the main factors I consider that may affect the sale of electric motorcycles. I may received more main factors which affect the sale of electric motorcycles from the shopkeepers. Before I interview the shopkeepers, I should realize the basic data of the present electric motorcycles in Finnish market. After the interviews, I received the primary answers form the shopkeepers. The final answer of the question is given in data analysis.

- Sub-research question:

How can Chinese electric motorcycles be developed through this product analysis?

Purchasers or resellers increase understanding of customers' needs and product information through this product analysis. Therefore, purchasers or resellers can provide proper Chinese electric motorcycles for their customers. Chinese electric motorcycles will be promoted by correct supplies of purchasers or resellers. According to the market analyses in chapter 4, I give suggestions to develop Chinese electric motorcycles for southern Finland market. The suggestions are presented in chapter 5.

1.3 Research Method

All research methods in the thesis help me to make the product analysis of Chinese electric motorcycles. The research methods include one quantitative method and two qualitative methods. Interviews, observation and document analysis are used to collect empirical data and general statistics. Data of interview is utilized in the external

product analysis. Data of observation and document analysis are utilized in the internal product analysis.

Because I need to find out the main factors which affect the sale of electric motorcycles in southern Finland, the interviews were conducted in southern Finland. In addition, in order to show cost competitiveness of Chinese electric motorcycles, I observed prices of Chinese electric motorcycles in China. Therefore, the research is multinational. Interview is conducted to collect data of hot sale of electric motorcycles and customer's interests of motorcycles. Observation is conducted to collect prices of Chinese electric motorcycles in China. A unique qualitative research in thesis is document analysis. The document analysis provides general statistics of Chinese electric motorcycles. Those general statistics were all found on the internet.

Interview and observation both belong into qualitative research. Denzin and Lincoln (2000) argue that qualitative research involves an interpretive and naturalistic approach by stating that "This means that qualitative researchers study things in their natural settings, attempting to make sense of, or to interpret, phenomena in terms of the meanings people bring to them". In my own words, qualitative research is a method or an angle to study the inherent regularity of an event or a phenomenon. The method is on the basis of social phenomena or object's nature.

In my qualitative research, interview by phone is used as the research technique. Because my target market of the project is southern Finland, the proper place for interviews represents southern Finland. The qualitative data was collected from 3 to 5 shopkeepers in southern Finland. Another qualitative research is observation. I collect the prices of 40 electric motorcycles at real shops in two Chinese cities. A total of 20 prices are collected in Guangzhou. Other 20 prices were collected in Zhuhai. A figure is used to analyze the prices of Chinese electric motorcycles.

Document analysis in the thesis provides importing data of Chinese electric motorcycles in Europe. The importing data makes readers understand the situation of Chinese electric motorcycles in international perspective. Because printed data of Chinese electric motorcycles are not easily available currently, all data in document analysis were found on the Internet.

1.4 Structure of Thesis

Chapter 2 provides the main theories of product market analysis. It includes the concepts of product analysis and market analysis. Chapter 3 focuses on the objective and analysis of the research which utilizes the interview method, observation method and document analysis. This chapter discusses how to collect data from interviewees and observations. As the main body of the thesis, chapter 4 is the practical part of philosophies, which involves the analysis and results of Chinese electric motorcycles. SWOT analysis is presented as results of product analysis of Chinese electric motorcycles finally. The final chapter draws conclusions and limitations of the thesis. I point out some potential types and busy season of Chinese electric motorcycles. The top brands and manufacturers of Chinese electric motorcycles are displayed in this chapter. The information in the conclusions chapter is the most useful for purchasers and resellers of Chinese electric motorcycles. Finally, limitations of this study are conducted in chapter 5.

2 PHILOSOPHIES OF PRODUCT MARKET ANALYSIS

The thesis depends on the theoretical framework of product market analysis. Chapter 2 is divided into two sub-chapters. Sub-chapter 2.1 discusses the concept of product market analysis. In this part readers learn what product analysis is and what to do in a product market analysis. The second sub-chapter focuses on the theories of product analysis and market analysis. Chapter 2 is entirely theoretical discussion. The target produce, Chinese electric motorcycles are excluded from the discussion in this chapter.

2.1 Concepts of Product Market Analysis

Product market analysis is an analysis of a specific product in target market. The product may be a good, a service, a good plus service, or just an idea (Sherlekar & Gordon 2010). The concept of analysis describes the process whereby, for example, data, a subject area or domain is examined in detail in order to better understand it (Stokes 2011). Therefore, product market analysis is a process describes a specific product with detailed investigate in order to understand the specific product better. The detailed investigate is made in the target market.

There is not an accurate definition of product market analysis in the literature dealing with product management. What I found in the literature is an analysis of the development of a new product. Trott (2008) states five perspectives from which to analysis the development of new product. These five perspectives are production management, Marketing, Economic, Design and engineering, and R&D. “The variety of views presented on the subject is not a weakness. Indeed, it should be seen as a strength, for these perspectives illuminate the areas that are left in the dark by other perspectives” (Trott 2008). Product market analysis attempts to make explicit the

strength of a product through five perspectives. Product market analysis is prior work to avoid tapped in hell when a product entered or expanded in a target market.

Product analysis is a necessary step in a marketing strategy. “In marketing, product analysis and research is a study of consumer preferences and habits as well as dealer preferences and habits relating to a given product. Such a study can determine the extent to which the product should be altered, modified or adapted to meet exactly demands of the customers and resellers. The study can also enable to devise a new product exactly needed in the market.” (Sherlekar & Gordon 2010.)

In order to conduct a detailed understand product market analysis, the meaning of market analysis should be explained here. “Intelligent market analysis and research can dictate the taste, color, size, shape, style, performance and such other specific features on the basis of customer whims, fancies and preferences. On the basis of such reliable information about customer demand, a manufacturer can bring out a tailor-made product having all the elements in exact tune with the needs, wants and expectations of customers.” (Sherlekar & Gordon 2010.)

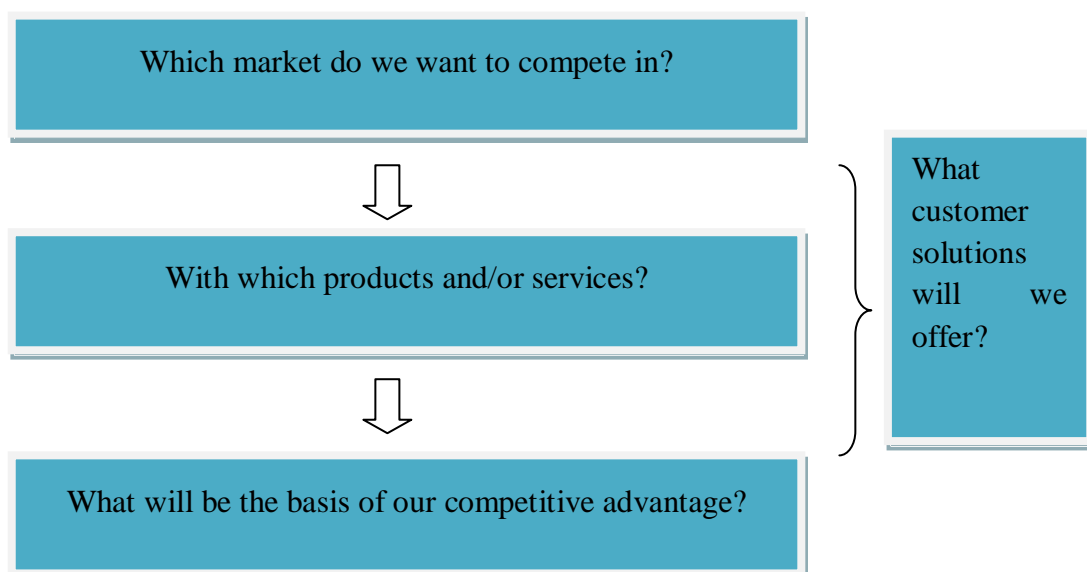


Figure 1. The key dimension of marketing strategy (Gilligan & Wilson 2003)

Gilligan and Wilson (2003) state that “strategic marketing can be distilled down to the planner deciding – with complete clarity – in which markets the organization wants (or is able) to compete, and then how exactly it will do this.” Figure 1 below shows the key dimensions of marketing strategy in Gilligan and Wilson’s (2003) opinion. In developing the strategic marketing plan, the strategist needs to take as one of the starting points the analysis of the 3Cs of strategy: customers, competitors and capabilities (Gilligan & Wilson 2003). Market analysis analyzes the factors presented in Figure 1 which include product factor, customer factor, and competitor factor.

“Product-related terms do not - by themselves - adequately describe a market. A complete product-market definition includes a four-part description. They are product type (type of good and type of service), customer (user) needs, customer types and Geographic area. In other words, a product-market description must include related term – not just product-related terms.” (William & Jerome, 1996.)

2.2 Internal Product Analysis

Internal issues which are directly relevant to the customers under consideration are discussed in this sub-chapter. These issues must be narrowed in focus (Dibb & Simkin 1996). There are two essential factors of successful marketing (1) product, and (2) markets. If marketing can bring together products correlated, there is no reason why marketing cannot be successful. (Sherlekar & Gordon 2010) Internal product analysis emphasizes the first essential factors, product itself. A range of internal product issues include strengths and weaknesses.

The strengths and weaknesses are summed up according to the performance of product. In many instances buyers will forward their performance criteria to a list of suppliers and await a quote detailing price, warranties, delivery, etc. Table 1 shows

typical product performance criteria commonly used in assessing a product. (Trott 2008.)

Table 1. Product performance criteria (M. Baker and S. Hart 1989).

Product performance factors	
1 Performance in operation	9 Safety in use
2 Reliability	10 Ease of maintenance
3 Sale price	11 Parts availability and cost
4 Efficient delivery	12 Attractive appearance/shape
5 Technical sophistication	13 Flexibility and adaptability in use
6 Quality of after-sales service	14 Advertising and promotion
7 Durability	15 Operator comfort
8 Ease of use	16 Design

2.2.1 Position Analysis

William & Jerome (1996) state “positioning helps manager understand how customers see their market. It is a visual aid to understanding a product-market.” “Positioning usually focus on specific product features and brands that are close competitor in the product market. Thus, it is a product-oriented approach. Important customer-related dimensions – including needs and attitudes – may be overlooked.” (William & Jerome 1996.)

“If customers treat difference products as substitutes, then a firm has to position itself against those products too. It can’t just focus on a few product characteristics or

benefits if they aren't the determining dimensions of the target market. Thus, it's usually best to rely on positioning approaches when they are part of a broader analysis – which in turn helps to ensure that the whole marketing mix is positioned for competitive advantage.” (William & Jerome 1996.)

2.2.2 Data Analysis

“Modern design environments are highly computerized, containing a wide variety of tools producing vast amount of information. This information produced in different formats, in widely dispersed location, on heterogeneous computer networks, needs to be stored and related to other data.” “The management of product data is not a new activity. Traditionally, text documents and drawings have been archived on paper. These had to be identified and classified. Provided that the amounts of information produced were reasonable, the storage of documents in filing cabinets was manageable – even if the manual work associated with physical archives could be inconvenient. As computer technology evolved, more and more product data was created in digital form.” (Ivica Crnkovic 2002.)

2.3 Strengths and Weaknesses of Product Analysis

2.3.1 Product Strengths

The strengths include experience, facilities, staff expertise, impartiality, product range, product performance (Dibb & Simkin 1996). My thesis is a product analysis of Chinese electric motorcycles, so I discuss the internal strengths which only include product range and product performance.

“Strengths are areas of (distinctive) competence that always be looked at relative to the competition. If strengths are managed properly, they are the basis for competitive advantage. Strengths derive from the marketing asset base. Even when a business has

a major strength in a particular area, this strength does not invariably translate into a competitive advantage.” “There are several possible explanations for this, the two most prominent of which are that it may not be a competence that is any real importance to customers, or that it is an area in which competitor are at least equally strong.” (Gilligan & Wilson 2003.)

2.3.2 Product Weaknesses

The weaknesses include product age, knowledge of customers, prices and resources (Dibb & Simkin 1996). Internal weaknesses should be minimized and modified in a product planning. Weaknesses are areas of relative disadvantage that indicate priorities for marketing improvement, highlight the areas and strategies that planner should avoid.

2.4 External Product Analysis

The external audit takes a systematic look at the environment, particularly the immediate environment, and future environment. The external audit seeks to discover: (1) who are the major competitors; (2) what are their objective and strategies; (3) what are their strengths and weaknesses; (4) what are their typical reaction patterns. (Ray Kent 2007.)

External analysis includes threats and opportunities. Dibb & Simkin (1996) state threats and opportunities are outside the control of the business. “External analysis should be possible to identify the extent of any threat from competitors, the power possessed by customers and supplier, and the threat of substitute goods and service emerging.” (Ray Kent 2007)

2.4.1 Customer Analysis

“Customer analysis includes Customer (user) needs and customer types. Customers (user) needs refer to the need the product type satisfies for the customer. Correctly defining the need (s) relevant to a market is crucial and requires a good understanding of customers. Customer type refers to the final customer or user of a product type. To define customer type, marketer should identify the final consumer or user of the product type, rather than the buyer – if they are different.” (Aaker & Mcloughlin 2010.)

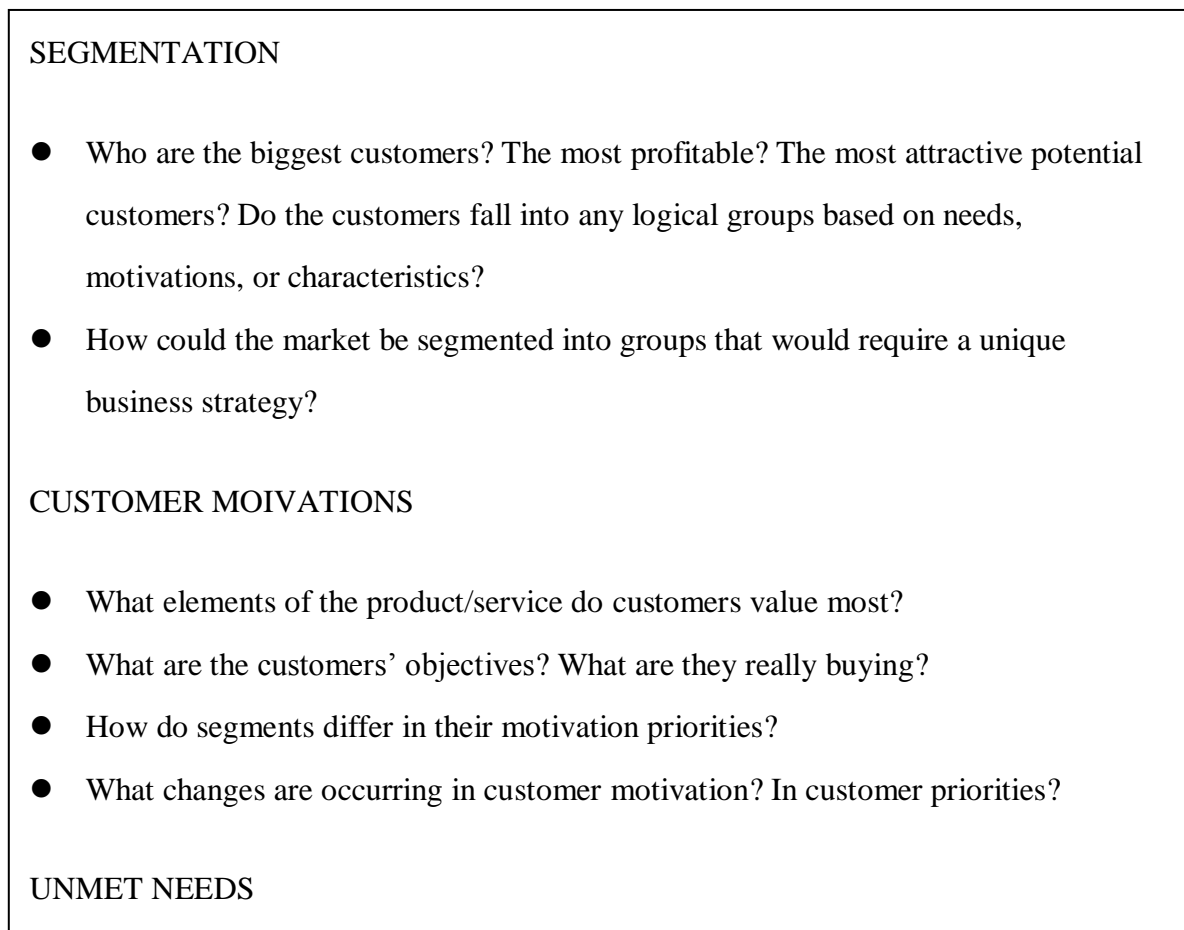


Figure 2. Customer analysis (Aaker & Mcloughlin 2010).

“Customer analysis can be usually partitioned into an understanding of how the market segments, an analysis of customer motivations, and an exploration of unmet needs” (Aaker & Mcloughlin 2010). Figure 2 shows the context of customer analysis.

2.4.2 Competitor Analysis

Competitor analysis starts with identifying current and potential competitors. The tasks of customer analysis are to understand who the competitors are and evaluate the competitors. There are two very different ways of identifying current competitors. The first examines the perspective of the customer who must make choices among competitors. The second approach attempts to place competitors in strategic groups on the basis of their competitive strategy. (Aaker & Mcloughlin 2010.)

“In competitor analysis, it is necessary identifying and evaluating competitors’ strengths and weakness. By this step, it should be apparent that the identification and evaluation of competitors’ strengths and weaknesses and capabilities is the very heart of a well-developed competitive strategy. The marketing planner should as a first step therefore concentrate upon collecting information under a number of heading as a prelude to a full comparative assessment.” (Gilligan & Wilson 2003)

2.4.3 Market and Environment Analysis

With the environment there are two distinct components: the microenvironment and the macroenvironment. “The microenvironment includes the organization itself, its suppliers, its distribution network, customers, competitors, and the public at larger.” “The macroenvironment consists of the rather border set of forces that have a bearing upon the company, including economic, demographic, technological, political, legal, social and culture factors.” (Gilligan & Wilson 2003.)

In my thesis, I make market and environment analysis for Chinese electric motorcycles through economic, legal, social and culture factors. “For both types of company there is still a need to understand how the economic environment is likely to affect performance – a need that received a significant boost in the 1970s in the wake of the oil crisis, when parallels were being drawn between that period and the Great Depression of the 1930s.” “The political and legal environment is composed of laws, pressure groups and government agencies, all of which exert some sort of influence and constraint on an organizations and individuals in society. The social and cultural environment should be apparent from what has been said so far that a board perspective needs to be adopted in looking at the economic environment.” (Gilligan &Wilson 2003.)

2.5 Opportunities and Threats of Product Analysis

2.5.1 Product Opportunities

A market opportunity is an area of consumer needs in which a product can perform. The external opportunities are market opportunities. A market opportunity is an area of buyer need which a product can satisfy. The external opportunities include market growth, legislation, internal market, customer needs, struggling competitors and government support. (Dibb & Simkin 1996.)

“Opportunities are environmental trends with positive outcomes that offer scope for higher levels of performance if pursued effectively. They highlight new areas for competitive advantage. An opportunity can be seen as any sector of the market in which the company would enjoy a competitive advantage.” (Gilligan &Wilson 2003.)

2.5.2 Product Threats

“An environmental threat is a challenge posed by an unfavorable trend or development that would lead, in the absence of defensive marketing action, to deterioration in sales or profit” (Ray Kent 2007). External threats include foreign market, subsidies, substitute technologies (Dibb & Simkin 1996).

“Threats are trends within the environment with potentially negative impacts that increase the risks of a strategy, hinder the implementation of strategy, increase the resource required, and reduce performance expectations. An assessment made of the feasibility and action needed if the organization is to minimize the impact of the threat. Threats can be identified on the basis of their seriousness and the probability of their occurrence.” (Gilligan & Wilson 2003.)

3 RESEARCH METHODOLOGY

This chapter describes research methodology used in the thesis. The methods and techniques discussed here are applied to answer the main research question and the sub research questions which are discussed in introduction chapter. The stages of the research process and data collection are also presented in this chapter.

3.1 Choice of Method

There are three methods used in this empirical research, i.e. interview, observation and document analysis. These three methods emphasize two different markets. An interview is a qualitative research method which is conducted in southern Finland by phone. Interviewing was chosen to search the need of electric motorcycles in southern Finnish market. Observation is a qualitative research method which is conducted in southern China for completing the research in this thesis. Observation is chosen to get the real data of Chinese electric motorcycles. The quantitative research in the thesis is document analysis. Document analysis covers the statistics both in China and Europe.

3.1.1 Interview

“An interview is a conversation, an interrogation or an oral exchange with the objective of securing data and ultimately information” (Stokes 2011). There are two main objectives of applied interview in the thesis. The first objective of interview is to get current information of electric motorcycle in southern Finland. The second objective is to understand customers’ need of electric motorcycle in southern Finland. In the thesis, interviews were conducted via phone. At least three interviewees were interviewed.

Because my target market of product analysis is southern Finland, sampling cities should be chosen in southern Finland. All sampling cities were chosen from Helsinki area. Helsinki area includes four cities which are Helsinki, Vantaa, Espoo and Kauniainen.

The interviewees are shopkeepers of motorcycle shops in Helsinki area. The interviews were conducted in English. In each interview I asked twelve questions. Those twelve interview questions emphasize the factors which affect sales of motorcycles and electric motorcycles in southern Finland. The interviews were conducted in Finland before observations in China. All interviews were made on 10th November, 2011. The qualitative data is presented in the data analysis of interview in chapter 4.

3.1.2 Observation

Pure observation is used in the thesis. Pure observation is a research method that comprises data collection via process of watching objectives required to research. In my thesis, I conducted qualitative observation in southern China. The objective of observations is that understand the cost of Chinese electric motorcycles.

Observations are conducted in two cities in China. The sampling cities are Guangzhou and Zhuhai.

The observations focus on the prices of electric motorcycles in Chinese market. Because observations were made in two different Chinese cities, observations were made in two different days. I collected sale prices of 20 electric motorcycles in each sampling cities. Totally, I recorded the sale prices of 40 electric motorcycles in Guangzhou and Zhuhai. According to the records of sale prices of electric motorcycles, qualitative data were made as charts. The qualitative data displays the price range of Chinese electric motorcycles' supplier.

3.1.3 Document Analysis

“Document analysis is the systematic examination of instructional documents such as syllabi, assignments, lecture notes, and course evaluation results in order to identify instructional needs and challenges and describe an instructional activity. The focus of the analysis should be a critical examination, rather than a mere description, of the documents.” (Instructional Assessment Resources 2007.)

There are four situations that document analysis is suggested to use. The four situations are (1) gaining insight into an instructional activity or approach; (2) examining trends, patterns, and consistency in instructional documents; (3) providing a preliminary study for an interview, survey, or observation. Interview questions, survey questions, or an observation checklist can be informed by a document analysis; (4) evaluating aspects of a course. (Instructional Assessment Resources 2007.) My thesis matches the first situation and last situation. Document analysis of Chinese electric motorcycles gained insight into product analysis and evaluating market potential.

3.2 Empirical Research Process

The main steps of the empirical research are discussed in this selection. The research methods used in the thesis include two qualitative methods and one quantitative method, which are interview, observation and document analysis. The details about the methodology are also presented. The research process is divided into five steps.

The first step is preliminary research of electric motorcycle. The aim of this step is to prepare basic and necessary information of electric motorcycle for the research. It is essential to understand relevant sources and information about electric motorcycle when I make interview and observation. The information of electric motorcycle is

collected from articles online. I also understood facts of electric motorcycle in Tornio, Finland before I conducted this research.

The second step is to prepare the phone-interview and observation. Placements of phone-interview and observation need to be made sure after I understood the information of electric motorcycle. My target market of the strategic market analysis plan is southern Finland, so I choose Helsinki area as my interview's placements. Helsinki area is Finnish capital region which includes Helsinki, Vantaa, Espoo and Kauyniainen. Phone numbers of motorcycle shops are searched online. 15 phone numbers of motorcycle shops are chose randomly. I called continually until I got 3 complete phone-interviews. In this step, I need to prepare interview's questions. Preparing the interview questions is need to understand the background of electric motorcycle which I done in first step.

In December, I went to China to have observation in two Chinese cities, Guangzhou and Zhuhai. Before I visited motorcycle shops, I need to search addresses of motorcycle shops in those two cities. I chose 20 electric motorcycles in each city randomly and record prices of 40 electric motorcycles totally in two cities. Until I collected the prices of 20 electric motorcycles in each city, I stopped visiting motorcycle shops.

The third step is practical operation of research methodology. Phone-interviews were conducted in Finland and observations were done in China. In November, 2011, I finished three phone-interviews in a day. In December, 2011, I finish observations in two different cities. The first observation is made on 20th November, 2011 in Guangzhou. The second observation is made on 4th December, 2011 in Zhuhai. Documents of Chinese electric motorcycles were collected from internet. All documents were collected completely at the end of December.

The last step is analysis of data from three research methods. This step is most important in this research. The conversations of three phone calls were transcribed in appendices. Qualitative data was made for analysis of phone-interviews and observations. According to the data collected from observations, I made a figure to show the prices level of Chinese electric motorcycles. Furthermore, quantitative data was study in document analysis. General statistics were collected to discuss the situation of Chinese electric motorcycles.

All interviews and observations were operated following the research process. Because all interviews were voluntary, information got from interviews by phone was limited. Some shopkeepers tried to sell their motorcycles when they were having interviews. However, I still got basic and useful data through interviews. The observation did in China were smooth going. Prices of 40 electric motorcycles were collected in two Chinese cities, so the prices collected in observations cannot represent the price range of Chinese electric motorcycles. Actually, the prices collected in observations are a reference of electric motorcycle's suppliers in China. Finally, interviews and observations were conducted in Finland and China respectively, so the unit of money is different. I compare all the prices in Euro in chapter 4. At last, Reliability of documents is accuracy. Most of documents were search from website of Chinese motoring industry. Unfortunately, reliable and valuable statistics can be found are all concerning Chinese electric bike. Those statistics are references of common situation of Chinese electric motorcycles.

The data of interviews, observations and documents analysis are the basis of internal and external product analysis. The data of observations and the document analysis is utilized to discuss the internal product analysis. The records of interviews are utilized to discuss the external product analysis.

4 CURRENT SITUATION OF CHINESE ELECTRIC MOTORCYCLE

This chapter gives details of the current situations of Chinese electric motorcycles both in southern Finland and China. This chapter is a practical text of the philosophies I discussed in chapter 2. SWOT analysis of Chinese electric motorcycles is presented as a result of the product analysis in this chapter, which includes product strengths, product weaknesses, product opportunities and product threats. Some qualitative data from chapter 3 is utilized in the SWOT analysis of Chinese electric motorcycles. In addition, customers' needs of Chinese electric motorcycles in southern Finland market are discussed as a part of product analysis.

4.1 Internal Chinese Electric Motorcycle Analysis

According to the characteristics of Chinese electric motorcycles, I give the internal product analysis in this chapter. The internal product analysis of Chinese electric motorcycles is divided into two parts: the data analysis of product and the results of the internal analysis. The analysis involves cost, design, operation, quality, image and history of Chinese electric motorcycles.

4.1.1 Position in Southern Finland

Before Chinese electric motorcycles positioning, I need to identify the structure of southern Finland market and the positions set by competitors currently. In Helsinki area, most motor shops are selling traditional motorcycles and electric scooters for the customers who are nearly 50 years old and around 20years old. According to the interviews with shopkeepers, I understand that electric motorcycle is not common in small motor industry. The main competitors of electric motorcycle are electric scooter and traditional motorcycle.

Chinese electric motorcycles are low-cost motorcycles with green idea. An image of Chinese electric motorcycles can be positioning as green motorcycles. The reasons of positioning as green motorcycles are electrical driven and low pollution. The low pollution includes low air pollution and low noise pollution. Electric motorcycles are electric driven without fuel pollution and combustion engine noise. Furthermore, because Chinese electric motorcycles are electrical driven, Chinese electric motorcycles can be positioning a value that customers can save cost from paying fuel. Compare with the price of traditional motorcycle in interviews and the price of Chinese electric motorcycles in observations, I suggest that Chinese electric motorcycles are much cheaper than traditional motorcycles.

The target customers of Chinese electric motorcycles are young customer range 16 years old to 30 years old. As a kind of almost new product developing in southern Finland, Chinese electric motorcycles needs to be accepted and understood. Young customers are the people who are interested in new things and accept new thing quickly. In addition, people who get A1 license of motorcycle in Finland must older than 16 years old.

4.1.2 Document Analysis of Chinese Electric Motorcycle

The document for the analysis is Exporting Report of Chinese Electric Bike (2011). Electric bike is a kind of product which is similar to electric motorcycle. I understood through the interviews with the shopkeepers (Chapter 3.2.2) that electric scooter is a hit product in southern Finland. Additionally, the resources of Chinese electric bike are rich. Therefore, I choose Exporting Report of Chinese Electric Bike (2011) to conduct the document analysis. I read Exporting Report of Chinese Electric Bike (2011) from TOPEASE Information on the Internet. Exporting Report of Chinese Electric Bike (2011) is written in Chinese and its acceptability was confirmed by supervisor of this thesis. I explain the report in this chapter.

According to the TOPEASE Information, the value and volume of Chinese electric bike exporting to European countries went down from January 2011 to September 2011. The downtrend was showed visibly in exporting to Holland. (TOPEASE 2011)

Table 2. Value and Volume of Chinese electric bike exporting to Holland between January 2011 and September 2011 (TOPEASE 2011).

Time	Total Value (US dollar)	Total Volume (ST)
January 2011	10294017	13969
February 2011	6172706	8522
March 2011	5580801	9529
April 2011	5669025	9516
May 2011	4867319	11729
June 2011	6686812	14167
July 2011	5719021	9217
August 2011	3266806	6276
September 2011	2106993	4315

According to Table 2, the total value and total volume of Chinese electric bike in January 2011 was the highest in 9 months. The reason for the highest statistics in January 2011 is stocking in a new year. After that, the total volume of June 2011 was the second peak of total exporting volume among 9 months. The reason for the second peak is the weather factor. Winter with snowing is not suitable to use the electric bike in Holland. On the other hand, summer is a perfect season to use electric bike. At last, total value and total volume reached the bottom in September 2011.

Table 2 is a useful reference for exporting Chinese electric motorcycles to southern Finland. Winter in Finland is extremely cold with heavy snow. Suppliers should avoid

exporting Chinese electric motorcycles to southern Finland in winter. The best period of exporting is the beginning of May.

TOPEASE gave two main reasons for the downtrend in Exporting Report of Chinese Electric Bike (2011). The first main reason is Europe had improved the standards of electric bike which import to Europe. Electric bikes of importing to Europe have to conform to the European standard (EN15914) or E/emark certification. Some Chinese manufactures stop exporting electric bike to Europe. The second main reason of the downtrend in Exporting Report of Chinese Electric Bike (2011) is European debt crisis. Demand for Chinese electric bike was decreasing in the whole European. (TOPEASE 2011.)

Although the exporting volume of Chinese electric bike decreased last year, Chinese electric motorcycles may have more opportunities in this downward situation. Dr. Shai Sofer of the Road Safety Authority notes that: "These regulations specify that electric bikes may have a motor of no more than 250 watts output; that their speed be no higher than 25 kph; and that the motor be operated by pedaling and not a throttle." Furthermore, riders must be at least 14 years old. (Israel News 2011.) Both the standard for electric bike and the standard for electric bike rider are stricter than before. In Finland, people older than 15 years old can drive mopeds. People older than 16 years old should have A1 license to use of light motorcycle. Electric motorcycle can be an alternative of electric bike for people older than 16 years old in Finland.

In 2010, there were 1.6 million electric motors exported from China. The main markets imported Chinese electric motors are America, Holland and Germany (Exporting Data of Chinese Electric Motor 2010). In the interview research, two shopkeepers of Helsinki motor shops informed that they stocked electric scooters and electric motors from Holland. Therefore, I infer that Holland is a transfer business hub

of most Chinese electric motor sold in Finland. Cost of importing Chinese electric motor in Holland should be higher than importing Chinese electric motor directly from China, because suppliers of Chinese motor in Holland need to get price difference in business.

4.1.3 Analysis of Observation

I went to two real motorcycle shops in Guangzhou and one motorcycle shop in Zhuhai to collect prices of 40 electric motorcycles. In the observations, the prices of electric motorcycles were collected randomly.

The two shops I visited in Guangzhou are named Xingfa Motorcycle Shop and Mingjiang Motor Shop. The shop I visited in Zhuhai is named Luwushuang Electric Mobile. I did all observations in China, so all the prices are displayed in Chinese currency, Riminbi Yuan.

All prices of the 40 electric motorcycles collected during the observations are displayed in Table 3. As Guangzhou is the capital of Guangdong Province, the electric motorcycles are diversified. The prices of electric motorcycles are range from 880 RMB to 5500 RMB, which are the cheapest and the most expensive among the 40 electric motorcycles. Most prices of electric motorcycles shown in Table 3 range from 2000 RMB to 2999 RMB, which are 47.5% of the amounts of electric motorcycles in observation. The average price of the 40 electric motorcycles is 2450.85 RMB, which equals to 292.81 Euro.

Table 3. Prices of 40 electric motorcycles in Chinese shops(Unit: RMB, 8.37RMB = 1 Euro, 14th January 2012)

City Electric Motorcycle	Guangzhou	Zhuhai
1	880	955
2	980	1100
3	1480	1380
4	1500	1800
5	1600	1880
6	1680	1980
7	1980	2000
8	1990	2000
9	2000	2009
10	2100	2100
11	2150	2200
12	2200	2200
13	2200	2350
14	2280	2350
15	2300	2550
16	2650	2790
17	2700	4200
18	4850	4600
19	4880	4800
20	5500	4890

According to the prices of electric motorcycles I collected, I made a pie chart of price distribution which is shown in Figure 3 below. Three electric motorcycles cost less than 999 RMB, which occupy 7.5% of the amount of the 40 electric motorcycles. Furthermore, there are 17.5% of the amount of electric motorcycles cost more than 4000 RMB among 40 electric motorcycles. As Table 3 shows, only one electric motorcycle is sold for over 5000 RMB. The prices of Chinese electric motorcycles range from 1000 RMB to 3999 RMB are the majority of Chinese electric motorcycles in observations. There are 75% of the amount of electric motorcycles cost 1000 RMB to 3999 RMB among all 40 electric motorcycles.

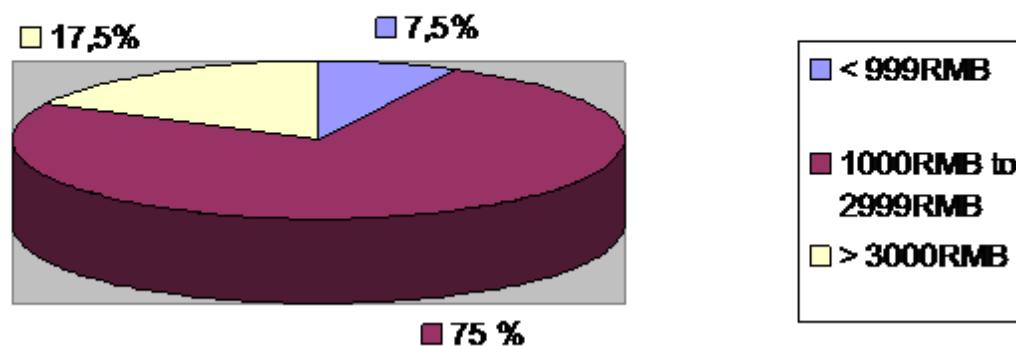


Figure 3. Price distribution of electric motorcycles in observation

4.2 Strengths and Weakness of Chinese Electric Motorcycle

4.2.1 Strengths of Chinese Electric Motorcycle

There are four strengths of Chinese electric motorcycles in southern Finland market. These four strengths are analyzed through cost, performance and design of Chinese electric motorcycles.

Costs of Chinese electric motorcycles are the main strength in southern Finland market. The “cost” I mention here includes the cost of brought a Chinese electric motor cycle and the cost of used Chinese electric motorcycles. In the observations, 75% of the amount of Chinese electric motorcycles cost from 119.47 Euro to 358.30 Euro. The most expensive Chinese electric motorcycles cost 657.11 Euro. In the interviews with shopkeepers, the shopkeepers stated electric motorcycles and electric scooters sold in Helsinki area cost range from 1100 Euro to 2000 Euro. Therefore the difference of price between China and Southern Finland is about 1000 Euro without transportation fee and taxations. In addition, customer can save to pay fuel when they use Chinese electric motorcycles. I suppose a citizen drive a motorcycle with about 900 km every month as a normal life. The citizen should pay about 33 Euro for petrol sold 1.56 Euro per liter (price on February 2012). If the citizen use a Chinese electric motorcycle in his/her life, he/she can save about 33 Euro petrol cost every month.

The second strength of Chinese electric motorcycles is peaceful performance. Peaceful performance means quite and stable driven without pungent petrol fumes. Chinese electric motorcycles are quite when it is applied electric motor. Driver feels stable when he/she is driving a Chinese electric motorcycle without combustion engine.

The third strength of Chinese electric motorcycles is diversified designs. In the observations, I saw different styles of Chinese electric motorcycles. Except traditional

style which is heavy electric motorcycle, Chinese motor shops sold dirt electric motorcycle, old fashionable style electric motorcycle and cute style electric motorcycle. Diversified designs of Chinese electric motorcycles are an advantage sold to young customers in Southern Finland market.

4.2.2 Weaknesses of Chinese Electric Motorcycle

The first weakness of Chinese electric motorcycles is heavy and big size battery. Currently, normal battery used for Chinese electric motorcycles is lead acid battery. A 24V lead acid battery for a Chinese electric motorcycle is 15-25kg which occupies one third weight of a Chinese electric motorcycle. In addition, a time of charging a lead acid battery is long. A fully charged for a lead acid battery need to take about 6 hours in summer and about 8 hours in winter. A lead acid battery cannot be charge fully below 0°C, although a Chinese electric motorcycle can work regularly in winter time. Some Chinese manufacturers improve the battery of Chinese electric motorcycles with lithium battery. Lithium battery is lighter and smaller than lead acid battery, but the price of a lithium battery is twice of a lead acid battery.

Another the weakness of Chinese electric motorcycles is limited working hour because of its charged battery. A normal Chinese electric motorcycle can be driven about 80km with full battery charged. The speed of Chinese electric motorcycles is also limited. The highest speed of a normal Chinese electric motorcycle is range from 20km/h to 26km/h.

Furthermore, as an almost new product, Chinese electric motorcycles are not trusted from customers in southern Finland. Lots of customers do not understand information of Chinese electric motorcycles, so they will not try to buy Chinese electric motorcycles. The shopkeeper of EE-Speed & Motoring said “motorcycle has been

sold about 20 years. Some people still choose electric motorcycle.” Chinese electric motorcycles still needs more promotion and development in southern Finland.

4.3 External Chinese Electric Motorcycle Analysis

According to customer aspect, competitor aspect and market and environment aspect, I give the external analysis of Chinese electric motorcycles in this chapter. The analysis of interview reflects customers’ need in real situation. The customer analysis, competitor analysis and market and environment analysis are distributed into opportunities and threats of Chinese electric motorcycles.

4.3.1 Analysis of Interview

Totally, I called 12 different motorcycle shops in Helsinki area. The result is that three motorcycle shop keepers are willing to have interview by phone with me. Three interviewees are from R.M.Heino, EE-Speed & Motoring Finland and Vespiti Oy. Three interview transcripts are shown in Appendices 1, 2 and 3 respectively.

The first interview is conducted with the shopkeeper of R.M.Heino. In the thesis, I call the shopkeeper of R.M.Heino as shopkeeper R. R.M.Heino has three shops which locate at Helsinki, Tampere and Lahti in Finland. Shopkeeper R works at Helsinki shop. He states that R.M.Heino just sells electric scooters at Tampere shop and R.M.Heino may sell electric motorcycles at Helsinki shop in the future. R.M.Heino is the unique shop which purchases motorcycle from Asia directly. Germany and Japan is the main supplier country of motorcycles. Shopkeeper R describes that the age of customers is range from 20 years old to 70 years old; the main customers are around 20 years old. He also points out that the main customers are the people nearly 50 years old. “Because they have more money” (a shopkeeper of R.M.Heino 2011). The hot sale motorcycle in R.M.Heino is the second hand motorcycle which the price is range from 2500 Euro to 300 Euro.

The second interview is conducted with shopkeeper of EE-Speed & Motoring Finland. In the thesis, I call the shopkeeper of EE-Speed & Motoring Finland as shopkeeper E. shopkeeper E is the most active in the interview among three interviewees. EE-Speed & Motoring Finland is a motor shop located at Hyvinkää in Finland. As shopkeeper E mentions, there are about 9 electric motorcycles in EE-Speed & Motoring Finland. Holland is the main supplier country of electric motorcycle. Shopkeeper E emphasizes that the people around 30 years old are the main customers of EE-Speed & Motoring Finland. About busy season of electric motorcycle, shopkeeper E points out that the business of electric motorcycle relates the weather in Finland. "More people buy electric motorcycles in May. The weather becomes warmer and snow melt at that time. Everything is better, including our business" (a shopkeeper of EE-Speed & Motoring Finland). In EE-Speed & Motoring Finland, the price range of hot sale electric motorcycle is from 1100 Euro to 1700 Euro. At the end of the interview, shopkeeper E maintains that traditional motorcycle is still more popular than electric motorcycle currently. The reason is traditional motorcycle has about 20 years sales history.

The third interview is conducted with Vespisti Oy. In the thesis, I call the shopkeeper of Vespisti Oy as shopkeeper V. Vespisti Oy is a motoring and motorcycle repairing shop. As shopkeeper V mentions, Vespisti Oy has headquarter in Helsinki and a branch at Sastamala, shopkeeper V states about 6 electric scooters are sold at their Helsinki shop. The electric scooters are purchased from Holland and Spain. The main customers of Vespisti Oy are the people between 25 years old and 30 years old. Shopkeeper V points out that young people understand electric scooter each other. The price of electric scooters selling in Vespisti Oy is range from 1200 Euro to 2000 Euro.

Three shopkeepers gave their different opinions about electric motorcycle to me, but they also provided some same information of electric motorcycle with me. In the three interviews, three shopkeepers all describe that the main customers of electric

motorcycle or electric scooter are between 20 year old and 30 years old. Shopkeepers all underline the important of busy season selling electric motorcycle is April or May. All shopkeepers state that Finnish customers like black or dark color. Electric scooter is sold in three motorcycle shops. In addition, electric scooter is hot sold in EE-Speed & Motoring Finland and Vespisti Oy. Furthermore, three shopkeepers maintain Finnish people are aware of electric motorcycle, but shopkeeper of EE-Speed & Motoring Finland emphasizes that Finnish people just understand electric motorcycle a little bit.

4.3.2 Customer Analysis

Customer analysis is analyzing customer types. The customer type can be classified by sex, age and economic capability. In the thesis, I classify the customers by age factor and economic capability factor. Because the cheap costs of Chinese electric motorcycles, target customers are the low-end customers. Additionally, because of the limited speed of Chinese electric motorcycles, 16-18 years old people and seniors also can be the main customers of Chinese electric motorcycles. Young adults are easy to accept and glad to try a new product such as Chinese electric motorcycles, so young adults belong to the main customers of Chinese electric motorcycles. The three overlaps filled in dark blue in figure 4 are the target customers of Chinese electric motorcycles.

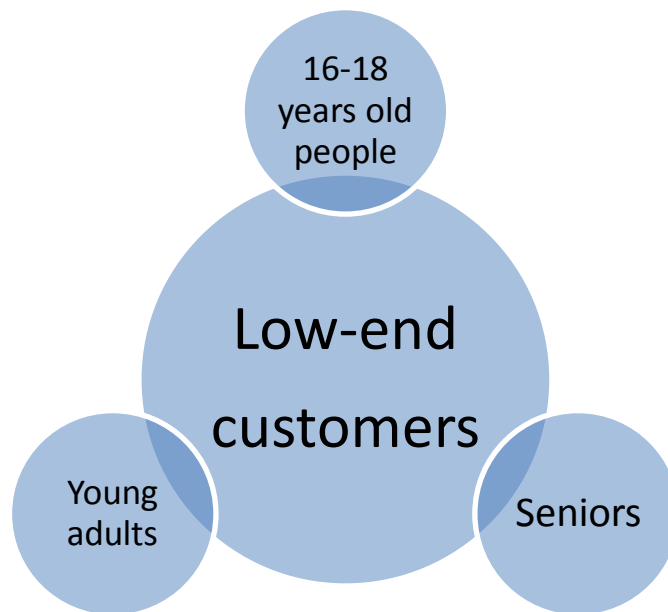


Figure 4. Target customers of Chinese electric motorcycles

4.3.3 Competitor Analysis

Currently, electric scooters and traditional motorcycles are alternatives of electric motorcycle in southern Finland market. Electric scooters and traditional motorcycles can be competitive products of electric motorcycles. I discussed the strengths and the weaknesses of electric scooters and traditional motorcycles below.

Electric Scooters have the same motor principle as electric motorcycles. They also have the advantages of electric motorcycles, such as low cost without fuel consumption and environmental image. In the interviews with motor shopkeepers, the shopkeepers of EE-Speed & Motoring Finland and Vespisti Oy indicated that most customers like the outline of electric scooter. In addition, people do not need a license to drive an electric scooter. However, electric scooters have a fatal

disadvantage which is slow limited speed. The speed of a normal size electric scooter is approximately 35 mph which is not enough to flow with free traffic.

Traditional motorcycles have fast speed which can reach 100 mph. The traditional motorcycles have mature motor technology, because they were developed more than hundred years' history. The shopkeepers stated traditional motorcycles are still popular in southern Finland because of 20 years history of motorcycle. However, the current increasing petrol price makes cost of feeding traditional motorcycles becoming more and more. Using a renewable energy is a future trend.

Furthermore, the most competitors of Chinese electric motorcycles are Japanese electric motorcycles. Japan has some experimental motor manufactures, such as Yamaha and Honda who have advanced electric motor technology. Compare with small and medium size manufactures of Chinese electric motorcycles, Japan electric motorcycle can enter southern Finland market easily depends on Japanese global brands.

4.3.4 Market and Environment Analysis

I present the market and environment analysis through economic, legal, social and culture factors. It means I analyze economic, legal, social and culture factors in Finland for Chinese electric motorcycles.

As figure 5 displayed, Finland's economy reached -60% in the first half 2009 which was the bottom from 2000 to 2011. Although Finland's economy went up sharply in 2010, it decreased observably in 2011 and the beginning of 2012. According to the data from Statistics Finland, the consumer confident indicator of Finland decreased from 20% to 0% in 2011. All data show economic is staying at depression. As a non-daily necessity, Chinese electric motorcycles are affected by depressive Finland's economy.

In legal aspect, drivers of motorcycle are strict standardizes by law of Finland. According to the law of Finland, people order than 15 years old can drive mopeds. People order than 16 years old should have A1 license to use of light motorcycle. Electric motorcycle can be an alternative of electric bike for people older than 16 years old in Finland.



Figure 5. Finland's economy (Statistics Finland 2012)

Currently, social facilities cannot scarify requires of electric motorcycle. Electric motorcycle has to be charged when its battery run out. There is limited public charger for electric motorcycle in southern Finland. If a destination is far from home, the driver of electric motorcycle cannot go back to home by electric motorcycle without public charger for electric motorcycle. The driver of electric motorcycle is possible to have trouble for charging his or her electric motorcycle out of home.

The environmental culture of Finland is an advantage factor to develop Chinese electric motorcycles in southern Finland. “Together with its Nordic neighbors, the country is a leading proponent of stricter international environmental standard and legislation in the European Union (EU) and other international arenas” (Embassy of Finland Ottawa 2011). In addition, in a global environmental investigation of World economic Forum, Finland ranked first among Nordic countries (SohuNews 2008).

4.4 Opportunities and Threats of Chinese Electric Motorcycle

4.4.1 Opportunities of Chinese Electric Motorcycle

According to the customer analysis, competitor analysis and market and environment analysis, I summarize opportunities of Chinese electric motorcycles in southern Finland. The first opportunity of Chinese electric motorcycles in southern Finland is wide target customer group. The target customers of Chinese electric motorcycles include young people and seniors in southern Finland. The second opportunity is environmental culture in Finland. The green idea of Chinese electric motorcycles matches the environmental culture of Finland well. Chinese electric motorcycles are developed easily in southern Finland with environmental culture.

Another opportunity is electric driven of Chinese electric motorcycles cater to the tense situation and policy of nonrenewable energy resources. The price of petrol is rising over the world, especially in Finland. The prices of unleaded petrol in Finland are 1.638 Euro and 1.691 Euro on 22nd February 2012. The rise in price of petrol is increasing cost of using a fuel motorcycle. On the other hand, the rise in price of petrol makes Chinese electric motorcycles to be economizer.

4.4.2 Threats of Chinese Electric Motorcycle

There are four threats of Chinese electric motorcycles in southern Finland. The first threat is poor charging facilities in southern Finland. The second threat is depressive economy of Finland currently. Both first and second threats are depression of Finland's economy and limited public charger for electric motorcycle, which are detailed presented in market and environment analysis.

The third threat is limited used time of Chinese electric motorcycles in southern Finland. As a Nordic country, the average annual temperature is about six degree Celsius. Winter is the longest season, and even at the south the day is short, at worst under six hours. (Fact about Finland) Long and cold winter of Finland is a limitation of promoting Chinese electric motorcycles in southern Finland.

The fourth threat of Chinese electric motorcycles is strict driven standards for electric motorcycle drivers. The standards of Finnish people to drive motorcycle are to be older than 16 years old and having A1 license. Customers would consider driven license of motorcycle when they buy an electric motorcycle. The result is some customers give up to buy an electric motorcycle, because not every customer has a driven license of motorcycle.

5 CONCLUSIONS AND LIMITATIONS

As a final chapter, this chapter presents the conclusions of product analysis of Chinese electric motorcycles in southern Finland and the limitations of research in the thesis. Product information is presented mainly according to analysis discussed in chapter 4. Limitations are indicated the disadvantages of the product analysis, interview and document analysis.

5.1 Conclusions

The objective of thesis is to understand market situation and search market potential of Chinese electric motorcycles through a product analysis. I answer two sub-questions discussed at the beginning of the thesis in this chapter.

To sum up, customers' needs of Chinese electric motorcycles do exist in southern Finland market. Chinese electric motorcycles integrate low cost of electric scooter with high speed of traditional motorcycle. The low cost is the main competitiveness of Chinese electric motorcycles. The rise of petrol price makes electric motoring become a main transportation in the future. Chinese electric motorcycles will be developed in the future. The main customers are young people and seniors representing the low-end consumers. However, Chinese electric motorcycles still need to be promoted in southern Finland.

According to the researches and data of chapter 4, I present three main suggestions for Finnish purchasers or resellers of Chinese electric motorcycles. Those suggestions are potential type, busy season and suppliers' reference of Chinese electric motorcycles, which all are discussed further below. The suggestions can help Chinese electric motorcycles meet customers' needs in southern Finland market.

5.1.1 Potential Type of Chinese Electric Motorcycle

The first suggestion is the potential type of Chinese electric motorcycles considering the prices range, color and style of Chinese electric motorcycles. The costs of Chinese electric motorcycles for Finnish purchasers should be less than 1000Euro - 1200 Euro, which includes fee of certification and transportation and taxation. Black is the hot sale color of Chinese electric motorcycles in southern Finland. Dark colors of Chinese electric motorcycles are also accepted in southern Finland market. Chinese electric motorcycles with traditional and cool outline are welcomed by southern Finnish customers. Some customers consider the weight of an electric motorcycle, and therefore light-weight Chinese electric motorcycles can be accepted in southern Finland.

5.1.2 Busy Season of Chinese Electric Motorcycle

A suitable season of purchasing Chinese electric motorcycles from China to southern Finland is the end of March or the beginning of April. As the information I got in interviews, May is the busy season to sell electric motorcycle. Snow is melted completely at the beginning of May in southern Finland. People begin to use motorcycle as a connection between home and work place. Electric motorcycle is also used to surfing outdoor in the summer time. The Chinese electric motorcycles should be arrived in southern Finland before May every year. The business of electric motorcycle is going to be slack at the end of September. The dormant period is from November to February.

5.1.3 Reference Suppliers of Chinese Electric Motorcycle

There are a wide number of Chinese electric motorcycle brands in Chinese market. How to select high valuable Chinese electric motorcycles from those numerous brands is a main question of purchaser or reseller. The thesis points out top 10 brands

of Chinese electric motorcycles according to Maigoo E-source which is a statistic website in different Chinese industries. These brands and their statistics are depicted in Table 4 below.

Table 4. Top 10 brands of Chinese electric motorcycles (Maigoo E-source 2012)

<i>Rank</i>	Name of Brand	Place of Origin
1	Xinri	Jiangshu, China
2	Yedea	Jiangshu, China
3	Lvyuan	Zhejiang, China
4	Sykee	Tianjin, China
5	Tailing	Shenzhen, China
6	Tengling	Jiangshu, China
7	Lima	Taizhou, China
8	Byvin	Shandong, China
9	Hongdu	Jiangshu, China
10	Incalcu	Shandong, China

Top 10 brands of Chinese electric motorcycles are evaluated in different aspects. The following 8 aspects are criteria of top 10 brands of Chinese electric motorcycles: (1) quality, (2) sales volume, (3) investment of advertisement, (4) developing potential, (5)

motoring technology, (6) speed of electric motorcycle, (7) reputation of a brand, and(8) marketing channel (Maigoo E-source 2012).

The research of top 10 brands emphasizes in Chinese market, the research mainly considers domestic competitiveness of Chinese electric motorcycles brands. However, the thesis focuses on the potential of Chinese electric motorcycles in southern Finland market. Therefore, I point out three most potential brands among those top 10 brands, according to international competitiveness of Chinese electric motorcycles brands.

Three Chinese electric motorcycles brands I recommend for southern Finland market are Lvyuan, Hongdu and Incalcu. Lvyuan, Hongdu and Incalcu rank third, ninth and tenth in Table 4. The reason why I selected these three brands is that their suppliers are experts in international trade of Chinese electric motorcycles. International trade experiment makes a company familiar with international logistics, certification of products and taxations issues.

Lvyuan Electric vehicle Co., LTD was established in Jinhua, Hejiang in 1997. Today, it is a high-tech enterprise in China now days. A total of 1.5 million Electric vehicles including electric bike, electric motorcycle and electric car were manufactured by Lvyuan Electric vehicle Co., LTD in 2010. America is the main international market of Lvyuan Electric vehicle Co., LTD.

Hongdu Co., LTD was established in Changzhou, Jiangshu. Hongdu has different series of electric motoring vehicles, such as golf carts, sightseeing vehicles and electric bikes. There are 1500 Hongdu Co., LTD points of sales in China. Hongdu is developing its international markets, such as America and Europe. Hongdu has got quality and safety system certifications of electric vehicles in America and Europe.

Incalcu Co., LTD was established in Shandong in 1985, which is one of the earliest electric motoring manufacturers in China. Incalcu has diversified products, such as

electric car, electric cargo truck and disabled tram. Incalcu has points of sales around the world, such as Japan, Korea, America and Italy etc. Incalcu is the first brand passed ISO9001 international quality system certification among all Chinese electric motoring brands.

5.2 Limitations

The thesis is not an all around product analysis because of the limited technical knowledge of Chinese electric motorcycles included in this thesis. As an undergraduate student majoring in business management, I have limited professional knowledge of motoring technology. Discussion of technical factors of Chinese electric motorcycles was neglected when I made internal product analysis.

Furthermore, there are three limitations in interview research. The first limitation is the language difference when I interviewed the shopkeepers by phone. Both shopkeepers and I are not native English speakers, and as a result, sometimes we cannot state own opinions fluently. Therefore, the information exchanged could have been misunderstood in our conversation. The second limitation is the low response rate of the phone calls in the interview research. The response rate of the phone calls in the interview research is 18.75%. The third limitation is a biased attitude of some interviewees. A shopkeeper tried to promote his motorcycles in the interview. The reason of second and third limitations is voluntary of interviews. The last limitation of interview research is the limited information available of electric motorcycle in southern Finland. Electric motorcycle is still not really common in southern Finland. When I interviewed three shopkeepers, one of the shopkeepers indicated that he only had traditional motorcycles in his shop.

There are two limitations in the observation research. The first limitation is the prices of Chinese electric motorcycles in observations cannot represent the price level of

Chinese electric motorcycles in the whole China. All observations I conducted were carried out in two southern Chinese cities. The average price of Chinese electric motorcycles in observations is not an accurate data, which also can be a reference for purchasers. The second limitation is the exchange rate between Renminbi and Euro. The different exchange rate makes prices of Chinese electric motorcycles unsteadily.

There are two limitations in the product analysis of Chinese electric motorcycles. The first limitation is indigestion of Finnish documents and news for me. Because I cannot read Finnish articles well, I missed some information of Chinese electric motorcycles in southern Finland market. The second limitation is defect in internal product analysis of Chinese electric motorcycles. I neglected taxation and transport factors when I calculated the price difference of Chinese electric motorcycles between China and southern Finland. Therefore, the real profit margin of selling Chinese electric motorcycles in southern Finland should be less than the profit I calculated in the thesis.

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APPENDICES

Appendices 1

The interview was held by phone on 10th November, 2011. The interviewee is a shopkeeper of R.M.Heino which is a motor shop in Helsinki, Finland. The interview was held approximate 17 minutes.

How long do you work in the motorcycle shop?

Since 2006, I also worked in Tampere and Lathi shops.

Well, you also worked in Tampere and Lathi.

Yes. Tampere shop is the first shop which opened in 1999.

How many electric motorcycles are you have in the Helsinki shop?

We do not have electric motorcycles, but I think we have about 60 motorcycles.

Which country is the main supplier of motorcycles in your shop?

I think it has to be Germany or Japan.

What is the age group of the customers buying motorcycles?

We have really wide age ranges. The people between 20 to 70 buy our motorcycles.

They are quite big age ranges for us.

Yes, it is a huge group. Could you tell me who the main customers are?

Oh, I Think is the people between 20 to 25. And nearly 50, because they have more money.

Yes, I can understand. For selling the motorcycle, which season is the busy season?

We sell motorcycle around the year. We are busy in spring.

Do you think Finnish people knew electric motorcycle?

...I think just a little bit.

Where do Finnish people get information of electric motorcycle?

I sorry I have no idea.

Does your shop sell electric motorcycle?

Probably in the near future, but we have electric scooter in our Tampere shop, not electric motorcycle.

What is the price range of the hot sale motorcycle in your shop?

The second hand motorcycle is hot sale which is around 2500 Euro.

Which color of motorcycles is popular?

I think it is black.

Well, Finish people always choose dark color.

Yes, customers choose black or dark color.

Which style of motorcycle is popular?

Probably people choose big size in this moment.

Do you mean the traditional and heavy motorcycle?

Yes.

Do customs think about environmental factor when they buy motorcycle?

I think not so much.

In your mind, do you think any else factor may affect the sale of motorcycle?

I have no idea.

The interview was held by phone on 10th November, 2011. The interviewee is a shopkeeper of EE- Speed & Motoring which is a motor shop in Hyvinkää, Finland. The interview was held approximate 12 minutes.

As a shopkeeper, how long do you work in the shop?

Since 2009, 4 years I worked here.

How many electric motorcycles are in your shop?

Let me think, maybe 9 electric motorcycles we have.

As those 9 electric motorcycles, which country is the main supplier?

... We buy motorcycles from different countries, Holland is our main supplier.

What is the age group of customers buying electric motorcycles?

The people between 25 to 30 or we can say the people around 30.

What is the busy season to sell electric motorcycle?

The people come to buy motorcycles in the early of summer.

You mean May and June?

Yes, more people buy electric motorcycles in May. The weather becomes warmer and snow melt at that time. Everything is better, including our business.

Do you think Finnish people knew electric motorcycle?

... Yes, I think most people knew electric motorcycle.

Do you know where they (Finnish People) get information of electric motorcycle?

On the Internet. They can find everything on Internet.

What is the prices range of the hot sale electric motorcycle?

The price range form 1100 Euro to 1700 or 1800 Euro.

Which color is the most popular?

Black.

Which style of electric motorcycle is popular?

We sell electric scooters mostly. People would like to have an electric scooter in summer.

Do customs think about environmental factor when they buy motorcycle?

Yes, they will think about it.

In your mind, do you think any else factor may affect the sale of motorcycle?

Actually, (traditional) motorcycle has been sold about 20 years. Some people still choose electric motorcycle.

The interview was held by phone on 10th November, 2011. The interviewee is a shopkeeper of Vespisti Oy which is a motoring and motorcycle repairing shop in Helsinki, Finland. The interview was held approximate 12 minutes.

As a shopkeeper, how long do you work in the shop?

I have worked here nearly 3years.

How many electric motorcycles are in your shop?

Right now not so much electric motorcycles are sold in our shop, 4 electric motorcycles we have

What is the age group of customers buying electric motorcycles?

...The people around 25 to 30 years old.

What is the busy season to sell electric motorcycle?

It should be May. In summer, we have more business.

Do you think Finnish people knew electric motorcycle?

... I thought they do not know well.

Do you know where they (Finnish People) get information of electric motorcycle?

Some of them share the information of electric motorcycle with their friends.

What is the prices range of the hot sale electric motorcycle?

Actually, electric motorcycles are not really hot sale.

OK, Could you tell me the price range of electric motorcycles in your shop?

Well, they range from 1200 Euro to 2000 Euro.

Which color is the most popular?

Black.

Which style of electric motorcycle is popular?

...Most people like cool and light electric motorcycle.

Do customs think about environmental factor when they buy motorcycle?

...Well, some of customers would think of that, but I am not sure.

In your mind, do you think any else factor may affect the sale of motorcycle?

Not any special. However it is still developing, it can be hit in the future.