Phuong Cao

BUSINESS POTENTIAL OF ARCTIC BERRY WAX FOR COSMETICS IN THE UNITED KINGDOM

Wax Project
BUSINESS POTENTIAL OF ARCTIC BERRY WAX FOR COSMETICS IN THE UNITED KINGDOM

Wax project

Phuong Cao
Bachelor’s thesis
Spring 2018
International Business
Oulu University of Applied Sciences
ABSTRACT

Oulu University of Applied Sciences
Degree Programme in International Business

Author: Phuong Cao
Title of Bachelor’s thesis: Business potential of Arctic berry wax for cosmetics in the United Kingdom
Supervisor: Helena Ahola
Term and year of completion: Spring 2018
Number of pages: 73+6

The Bachelor’s thesis examines strengths and weaknesses of Arctic berry wax and analyzes the natural cosmetics industry for the multi-disciplinary Wax Project with the participation of many Nordic universities. The project researches the environmentally sustainable methods to extract Nordic wild berry wax from industrial side streams and waste. Based on researching the methods, the applications of the wax in different fields are also studied with the goal of creating a new high-quality and valuable Arctic berry wax-based product. The project consists of different work packages and identifying its business opportunities is a section of the whole project and thereby, the project can raise its funding and collaborate with business partners.

The research aims to explore the business potential of Arctic berry wax for cosmetics in the United Kingdom. Based on the analysis of the ingredient and natural cosmetics market, the frameworks of SWOT and Value Proposition will be drawn so that readers will have an extensive insight into exceptional properties of the wax. Moreover, these frameworks are beneficial for natural cosmetics companies which plan to access the British market. With the help of a variety of analysis models concerning marketing research, the values of berry wax and the business markets of natural cosmetics industry are clarified. In addition to theoretical background, to obtain a practical view towards the subject, a qualitative interview with an experienced expert in this field is conducted.

On the basis of the wax and market research, it is claimed that the UK is an exceedingly potential market for natural cosmetics, including wild berry-based products. The market promisingly offers a range of business opportunities for the supplementary ingredient with the continuous growth of value sales and customer shift towards natural cosmetics. Along with it, due to the aggressive market, cosmetics companies will face a few challenges. However, as Arctic berries possess unique characteristics, natural cosmetics businesses can create competitive advantages to stand out amongst other competitors. The research can be used as a reference for Wax project’s partners and further studies regarding business strategies and marketing plan.

Keywords: business potential, natural cosmetics, competitive advantage, value proposition
1 INTRODUCTION

1.1 Background of the study

In recent years there has been an emergence of organic and natural ingredients which has contributed significantly to the development of cosmetics industry in the world. Accordingly, natural cosmetics have been sold increasingly rapidly and forecasted to be growing sharply in next years (Wirtschafts & Finanzzeitung 2005, 15). During the last year, in view of the increasing number of green consumers in cosmetics, the cosmetics industry has become considerably diversified and green (Dimitrova, Kaneva and Gallucci 2009, 1156). Likewise, customers who are now more concerned about the environment and ecology while still want to remain their youthful appearance are seeking free-chemical beauty commodities, both for skincare and makeup (Johri and Sahaaskmontri 1998, 265). Although the green market in cosmetics industry still accounts for the small proportion, it is rising faster and faster than the overall sector. The question how to succeed in a competing industry like cosmetics become the most difficult challenge many companies facing with. Therefore, organic and natural constituents have been one of the key drivers for many cosmetic brands to create value-added advantages, thereby they can be distinctive amongst numerous players.

It is undoubted that European markets have become not only one of the leaders in the natural cosmetics industry but also a potentially promising market. Particularly, Western Europe is more attractive than other regions due to the growth in the market share. The popularity of green products has been gained dramatically in these countries prior to the positive trend of consumers towards eco-friendly products (Martin & Simintiras 1995, 16; Schlegelmilch, Bohlen & Diamantopoulos 1996, 35; Nimse, Vijayan, Kumar & Varadarajan 2007, 131). The United Kingdom is the third country has the largest market share of cosmetics goods in the European area, after Germany and France (Jones & Dürbeck 2008, 7). In Germany and France, there has been a diverse range of well-known natural additives for cosmetics, including those stemming from Scandinavian areas. Unlike these nations, the UK is likely to be a prominently potential market for added combinations, particularly for raw materials from Nordic countries where the geographical conditions and botanic resources are favorable for the growth of expected components.
The primary subject of this thesis is to analyze the commercial potential of Arctic berry wax on the UK cosmetics market that is essential for Wax project, which will be represented later in this chapter. There have been several pieces of research and arguments regarding cosmetics in recent years, having said that, those theses have studied about marketing, customer behavior, purchasing, and procurement. Although the concept of natural cosmetics is not unusual anymore nowadays, it is likely to be non-existent for Arctic berries, which is relatively unpopular in cosmetics in the United Kingdom. Up to now, natural wax has been largely used in cosmetic applications, but for only some existing waxes such as beeswax, Carnauba and Candelilla wax. Few previous published studies have investigated the UK market but not dealt with the berry wax. For these reasons, theoretical background will be elaborated in a specific market to examine how business potential Arctic berry wax is for natural cosmetics in the country.

1.2 Research objectives and questions

The primary objective of this study was to research and analyze the markets of natural cosmetics in the UK in order to discover how business potential arctic berry wax is to be successful in this market. The market analysis would clarify the question of whether the partners’ research meets the market access requirements. Notably, this would give the readers an intensive insight into the natural cosmetics industry in the UK. Another goal of the research to gain the understanding of the importance of natural Arctic berry in the beauty industry. Finally, the study was an attempt to develop frameworks of SWOT and the value proposition for Arctic berry wax in this market. These frameworks play a substantial role in the project and could then be adopted in any country which is the targeted market of Wax project’s partners.

The central question needs to be answered to reach all those purposes is: How potential is Arctic berry wax in the UK cosmetics industry? With the aim of resolving this important question, the study intends to determine to address the following sub-questions:

- What is the significance of natural wax and arctic berry in the cosmetic sector?
- How is the natural cosmetics trend in England?
- How is the competition in natural cosmetics in the UK?
- What are the opportunities and challenges of access to the UK cosmetic market?
- How are experts’ attitudes towards natural cosmetic and new ingredients?
- How is the value of Arctic berry wax propositioned?
1.3 Methodology

One of the important parts of the thesis is information collection, which plays a vital role in analyzing the prospective market. A set of information was collected from primary and secondary sources through a desk study in pursuance of investigating the cosmetics market more accurately. The definition of primary data is identified as original data which is gathered for a specific research question at hand, for example, interviews and survey. Unlike primary data, secondary data are gathered for a different purpose and used for other researches such as reports, conferences, workshops, articles, theses, and e-resources. (Hox and Boeije 2005, 593.) With the purpose of solving the fundamental research questions, qualitative case studies were preferred to obtain the data. Qualitative data were yielded from several sources which include appropriate literatures related to market analysis and other published literature, governmental statistics on the Internet, company documents, and books. Particularly, the professionals and experts in the cosmetics industry were contacted to conduct interviews, by which the issues were discussed profoundly. Additionally, the information of the case company was also gathered through inquiries via website contact and school mail.

Case study emerges as one of the first research approaches in the qualitative methodology and has been widely used in many books and articles such as psychology, history, medicine, particularly in the social sciences (Starman 2013, 29). Despite being largely viewed to be involved in the qualitative research, case studies are often represented in quantitative studies as regards to research questions and goals (ibid. 2013, 30). In the field of methodology, discrete definitions of case study are found. Sturman (1997, 61) uses the term ‘case study’ to refer to the exploration of a subject, social phenomenon, person, or group. This definition is close to those of Mesec (1998,45) who defines case study as a general assessment and analysis of a specific matter in the field of social research and education. A further concept of case study is used by Simons (2009, 21) who considers the description to be done by investigating the complexity and particularity of an individual object from different perspectives so that the case could be explored underlyingly. According to a concept of provided by Rowley (2002, 16), case study is a research strategy applied in the prelamination of a science study conductive to establish and develop findings in an experiment. In this study, the term ‘case study’ will be used to refer to an empirical inquiry in the direction to examine a contemporary event in the practical context, yet the borderline of the case and context are not divided relevantly (Yin 1994, 13).
Prior to selecting case study as a research method, the consideration of whether its general conditions are suitable to a specific study. The selection depends on three factors including types of questions, the contemporary circumstances of the investigated object, and the extent of control over the fact. The case study approach is a useful research method in the case of answering how and why questions and investigating a contemporary fact over which the researcher is not able to control. Case study is different from other types of research as it analyzes less number of units and does not require a laboratory research to replicate the phenomenon. Another significant aspect of the approach is research design comprising components as regards questions, propositions, units of analysis, the connection between the evidence and propositions, and standards of findings interpretation. The types of questions in case studies has been indicated initially. As an exploratory and explanatory research, it is important to translate questions into propositions on the basis of their theoretical relations and evidences that have been found earlier. The unit of analysis that is the representation of cases is selected in which they are comparable to the questions, propositions, literature context and research objective. (Rowley 2002, 17-19.) Case studies are classified into single and multiple case. Single cases represent an experimental research of a particular event or an important test on a theoretical background, and this leads to the necessity of selecting case and unit in a proper way. In contrast, multiple cases are used to support or criticize the theories by replicating the experiments toward establishing a solid outcome of the study. The number of cases can be varied, and it occasionally ranges from six to ten. (ibid., 21.) Similarly, the unit of analysis is categorized into holistic and embedded cases. Holistic case is designed for one single unit of analysis with the objective of exploring the phenomenon in the global scale in case of no logical sub-units indicated, and perhaps resulting in the inappropriate outcome. In embedded designs, each unit is identified individually, and the results are subsequently grouped together to establish a consistent conclusion. (ibid., 22.)

Within the procedural process of collecting data, it is important to follow the guideline of a case study protocol. The protocol is composed of three elemental sections. The first section mentions the requirement of a general introduction of the case study planned. The second is concerned with plentiful information sources, citations of these accessible references. Case study questions included in the third section must be kept in mind when collecting data, in other words, the interview participants should not be informed the research questions in spite of the fact that interview questionnaires are formulated based on vital questions. (ibid., 22.) Regarding procedural aspect, this method uses various sources of data and evidence from documents, interviews, recordings, artefacts and observations. Irrespective of the sources referenced, data collection needs to be
comply with three principles: triangulation, case study database and chain of evidence. One major advantage of case studies is triangulation by which the investigator can use a diversity of information resources to collaborate the findings and increase the validity construction. Thanks to case study database, the solidity of fundamental findings will be enhanced by collecting more well-established evidences that provide the same outcome. The collection of evidence can be interview notes, documents, transcripts and content analysis. These evidences should be remained by citing documents, interviews, or even in the database for the practical findings. (ibid., 23.) There are no agreed procedures for how to analyze well case studies, but a comprehensive analysis is constituted by complying with some constitutive principles. Firstly, the relevance and transparence of all the evidence and findings need to be guaranteed. Secondly, the adverse findings should be identified and explained in detail so as to defend the primary distillation. Thirdly, the main emphasized aspects of case studies must be discussed and overcome. Finally, before transferring to experts in the field, the analysis is recommended to draw on the investigator with neutral sense of evaluation. (ibid., 24.)

The qualitative case study research is the most appropriate approach for the research by reason of the contemporary extent of natural cosmetics trend, the types of questions need to be answered and the fact of no control of the investigator over the tendency. In addition, the study objectives also reveal the need for further explanation and exploration of the objects, underlying strengths, and weaknesses, opportunities and threats regarding distinct for natural cosmetics. A case study approach was used to allow subjects to be explained and described in more details.

1.4 Structure of the study

The thesis consists of seven chapters: introduction, theoretical background, natural wax in cosmetics, market analysis in the United Kingdom, the interview of the case company, results of the study, conclusions and discussion.

The study initiates with the introduction which illustrates the background of the study, the inspiration for the chosen topic, and research objectives and questions as well as the methods of study and structure of the paper. Importantly, the first chapter also introduces WAX project – Natural Wax of Arctic Berries as Our Treasure, for which the thesis is essential to some extents. In chapter 2, the
theoretical background is comprehensively explained and argued by reviewing the literature and theories which would be used to analyze the market. Chapter 3 clarifies the definition of natural wax and its application and categories in natural cosmetics and further importantly, attributed to the demonstration of distinct values Arctic berry brings to beauty customers.

Chapter 4 exposes the stages of analyzing the UK cosmetics market with respect to assess the potential of natural cosmetics as well as Arctic berry wax based on the theoretical part. To put it another way, the assessment is managed through using a variety of external market analysis approaches. Chapter 5 is designed for the empirical part, which includes research methods, questionnaire, data collection, the analysis of data and results of the survey. Prior to being summarized and discussed, SWOT and Value Proposition Canvas models are portrayed as the results of the research. The final chapter presents the discussions and conclusion for the outcome of the thesis, and the recommendations for Wax project's partners as well as cosmetics companies are also provided in this chapter.

1.5 Wax Project

Natural Wax of Arctic Berries as Our Treasure is a multidisciplinary WAX Interreg research project granted by Interreg Nord, Regional Council of Lapland, Norrbotten County Administrative Board and Troms County. The project is the coordination of the University of Oulu, Oulu University of Applied Sciences, and Luleå Technical University, in which each university is in charge of different disciplinary research. Management activities such as project coordination, finance, communication, and reporting are the sphere of action of the Center of Microscopy and Nanotechnology (CMNT) from University of Oulu. Furthermore, this center also researches the methods of extracting berries towards environmentally sustainable development. Meanwhile, Department of Genetics and Physiology, Research group of Plant Biology and Biotechnology (PBB) from University of Oulu and Norwegian Institute of Bio-economy Research (NIBIO) is in charge of conducting research of Arctic berry wax. (Oulu University of Applied Sciences 2017, cited 3.9.2017)

The project aims to develop environmentally-friendly methods of extracting bilberry and lingonberry wax from the wild berry industry side streams and waste. This development could be applied to creating innovative, high-quality berry wax through the value chain of berry waxes. To reach the goal, the project is divided into different work packages in furtherance of concentrating on the core
function. Berries and berry residues’ chemical and materials are initially researched and analyzed to gain understanding wax-producing and compositing factors. Based on this research, the project will study an environmentally-friendly method to extract wax from wild berries and subsequently determine their business potentials. Eventually, the project will raise awareness of arctic berry wax amongst businesses and consumers.
2 THEORETICAL BACKGROUND

2.1 PEST Analysis

The concept of PEST analysis was first introduced in 1967 by Francis Joseph and remains well-known during the 1970s and it was used as a market analysis tool by several popular authors (Reitmeier & Schmidkonz 2016, 5). The original theory had been extended to a versatile model with different names such as PEST, SLEPT and STEEPLE. This common approach is used as an analysis model for the macroeconomic environment which is based on to draw a business plan, marketing strategy or launching new products (see figure 1). (Issa, Chang & Issa 2010, 3.)

Figure 1 describes the whole business environment of a company in which external factors influencing the company, its customers, and competitors placed in the center. These factors affect the company through two layers which are highly interdependent. The two layers are growth drivers and competitive pressure. The arrows indicate the impact direction of interdependencies.

![FIGURE 1. The competitive climate (Grundy 2006, 217)](image-url)
Since the external business environment has dramatically changed, the organizations should define how external factors exert influence on their business operations and activities. The model helps organizations to gain the understanding of the general business picture. Those factors are classified into four variables: Political, Economic, Social, Technological (see figure 1).

2.2 SWOT Analysis

SWOT analysis is a generally known business analysis tool which a company uses to analyze both internal and external factors in furtherance of formulating a business strategy (Harrison 2010, 92). The acronym SWOT stands for Strengths, Weaknesses, Opportunities, and Threats. Internal factors are strengths and weaknesses that organizations have control over, meanwhile, external factors are opportunities and threats that organizations have no control over.

Strengths are considered favorable to support a company, which is able to take an advantage of success, such as talented employees, high-advanced technology or the huge budget. By contrast, weaknesses are unfavorable aspects of a company, which could exert on negative influence on the business operations such as low-skilled employees, out-of-date technology, and high debt ratios. (Sarsby 2012, 27.)

Opportunities can be derived from innovative technology, government policies, population profiles, and market growth. All the favorable changes in the external environment are helpful for a company to operate their business successfully. Along with opportunities, there are possible threats which are unfavorable changes harming the business activities, for example, competition, increasing costs, government regulations, economic recessions, and changes in consumer behavior. (Sarsby 2012, 26.)

2.3 Porter Five Forces

Porter Five Forces model was introduced in 1979 by Michael E. Porter of Harvard Business School. This framework is used to analyze the competition level within an industry through the fundamental attractiveness of a market, which helps organizations to gain an understanding of their competitors’ activities (Grundy 2006, 215). Porter has defined five forces in microenvironments to assess the competition level, which comprises three ‘horizontal’ forces: competitive rivalry, threats of new
entrants, the threat of substitutes; and two ‘vertical’ forces: bargaining power of suppliers and bargaining power of customers (see figure 2). The reason for this division lies in whether the competition occurs within the market or the supply chain.

![Porter Five Forces Diagram](source: Competitive Strategy, Porter)

**FIGURE 2. Porter Five Forces (Grundy 2006, 215)**

As the key determinant of the industry competitiveness, competitive rivalry is required for a company to understand thoroughly its own competitors’ operations to with a view to generating their own supplementary value. The level of competitive rivalry depends on innovation, advertising, strategy, concentration ratio and degree of transparency (Porter 2008a, 85). There are a considerable number of potential new entrants entering an industry annually, which will decrease the profitability of all other companies in that sector. Nonetheless, these participants have also to face several potential factors such as patents, rights, government policy, capital, brand equity, and cost disadvantage (Porter 2008a, 80). Besides, the threat of substitute products or services also affects to a company’s competition through customer propensity, switching costs, differentiation, substandard divisions, quality depreciation and available alternatives (Porter 2008a, 84).

In terms of vertical forces, the bargaining power of customers refers to the pressure customers put the company under and it also leads to the changes in the price. The power of customers can be varied depending on the level of alternatives, price sensitivity, and customer value. (Porter 2008a, 84.) If customers effect on output market, then suppliers’ power lies in input markets as they supply
raw materials, components, labor, and services within the supply chain to the company. Suppliers’
activities affect switching cost or not, and the input differentiation. (Porter 2008a, 82-83.)

2.4 Value proposition canvas

In earlier years, value-concentrated organizations focus on activity based on the value proposition,
thereby generating profits from customers’ satisfaction. Likewise, Anderson defines the concept of
customer value proposition as the enterprise’s beneficial offerings to target markets and customers
(Anderson, Narus & Rossum 2006, 90). Value proposition definition is concentrated on solely the
customer and enterprise perspective. Nevertheless, some other expended concept with reference
to recruitment, referral, influence, internal, supplier and alliance markets can be found (Frow &
Payne 2011, 227). It has been claimed currently that the value proposition is simply a description
of the benefits products and services offered to customers who are willing to purchase with a certain
amount of bulks to exchange for them (Osterwalder 2012, cited 11.9.2017).

In 2012 Osterwalder created the Value Proposition Canvas (VPC) which has sharply grabbed high
attention from researchers as it has been built based upon well-known framework Business Model
Canvas (Äyväri & Jyrämä 2017, 1029). He has developed the VPC as a plug-in-tool for the
Business Model Canvas with the goal of supporting the vital business model in businesses and
gaining a better understanding of the customers and products or services. Through the VPC
businesses can recognize what customers want to get done, or which kinds of pain they are
enduring in favor of offering solutions and painkillers. Thanks to this model, organizations can easily
understand better the value creation patterns, whereby leverage and improve their offering quality
to satisfy the customers. The VPC is divided into two parts: value proposition and customer
segment (see figure 3). These two blocks match the jobs, the pains, and gains of the customer
segment and the value organizations offer through outputs and services (Osterwalder 2012, cited
17.9.2017).
The right-hand side of the VPC (see figure 3) is the customer profiles including three sections. The first task is to identify customer jobs that describe what kinds of work customers are trying to get completed through functional, social and emotional jobs. It is also shown what customers need and problems they are trying to solve (Osterwalder, Pigneur, Bernarda & Smith 2014, cited 17.9.2017). According to how often the jobs occur and its significance to the customer, they are ranked respectively (Osterwalder 2012, cited 17.9.2017). The next part of customer segment is customer pains which describe unfavorable conditions, and negative emotions customers experience within getting the job done. During the process the jobs occur, customers may face some obstacles, and risks that prevent them from completing their work. The pains are ranked based on how intense and frequent the barriers are (Osterwalder 2012, cited 17.9.2017). The third focus is the gains and benefits that customers expect and desires such as functional utility, social gains, positive emotions and cost savings. In consideration of ranking each gain, it is necessary to assess its relevance and frequency to customers (Osterwalder 2012, cited 17.9.2017).

Regarding value proposition, it begins with a list of all the goods and services that the enterprise offers to provide with values (Osterwalder et al. 2014, cited 17.9.2017). The enterprise needs to find out which assets and services it offers to help customers to get a functional, social and emotional job done, and then to satisfy them. Their ranks are based on their significance to the customer. The next part is pain relievers describing how those products and services alleviate the
pains customer experiences. One important point in this segment should be perceived that it is impossible to offer all pain relievers to remove all the negative experience. Hence, it is necessary to focus only critical pains that occur frequently and intensely (Osterwalder et al. 2014, cited 17.9.2017). The final segment is gaining creators that fit with customer gains on the right-hand side. It describes how products and services offer benefits that customers are expecting, desiring and even be surprised of. The pain relievers and gain creators have made up how the company’s offerings create value (Osterwalder 2012, cited 17.9.2017).
3 NATURAL WAX IN COSMETICS

3.1 Natural wax

General wax is defined as hydrophobic organic compounds which comprise long alkyl chains (Wikipedia 2017, cited 21.9.2017). It is occasionally buffable and dependent strongly on temperature, solubility, and consistency. Waxes transfer from soft, tacky to hard, plastic and breakable at 20 degrees Celsius and these substances will melt at about 40 degrees and up to 140 degrees Celsius. and after melting the re-solidifying status remains the same. Waxes exist in a form of natural, mineral and synthetic substances (see figure 4). It has been claimed that there has been no shared or common chemistry for all those categories of waxes, and this leads to the need of defining a generally accepted concept for wax. (Endlein & Peleikis 2011, 2.)

![Diagram of Waxes](image)

**FIGURE 4. Diversification of waxes (Endlein & Peleikis 2011,2)**

The term ‘natural wax’ refers to assorted hydrocarbons and fatty esters compounds from animals, plants, leaves, fruits, and peels. It melts above 45 degrees Celsius into a low viscosity liquid. Natural wax is regarded harder, and less greasy than oils and fats, especially insoluble in water, but soluble in organic solvents (CBI Market Intelligence 2015, 2). Natural waxes are processed sustainably from biogenesis and refined physically through a non-chemical transformation. Based upon the
process and application, natural waxes can be in the form of powder, emulsions, pellets, and prills. By cause of being produced in the sustainable process, natural waxes are well-known as truly natural raw materials, even organic in some cases. (Endlein & Peleikis 2011, 2) Natural waxes are divided into renewable or re-growing and non-renewable (see figure 4). The renewable waxes are originally from animal and plants which are chemically modified or unmodified such as beeswax, shellac wax, carnauba, candelilla, rice brain, berry, flower, and sunflower seed waxes. Meanwhile, the non-renewable waxes or fossil are originally from montan and petroleum, which can be either crude or refined, occasionally namely as petroleum-derived waxes. (CBI Market Intelligence 2015, 2) Renewable wax is the most common type of natural wax, which is original from carboxylic acids and fatty alcohols or unesterified hydrocarbons. Common examples of animal wax are beeswax and insect wax and Carnauba wax and Candelilla wax are symbolic instances of plant wax. Modified plants and animal waxes are waxes, or oils will undergo some chemical processes to produce the output waxes with more treasured values than available ones. This approach requires green chemistry processes and reactions to transform from reasonable materials to final waxes. (Wikipedia 2017, cited 21.9.2017.)

Nowadays, paraffin wax or petroleum derived wax has become more popular for being broadly used in the food industry, candles, and cosmetics, particularly in polishes and waterproofs. It consists of esters, paraffin waxes that are hydrocarbon chains comprising alkaline compounds (Wikipedia 2017, cited 21.9.2017). Other types of petroleum-derived waxes are montan wax and polyethylene and related derivatives.

### 3.2 Cosmetics applications of natural waxes

Waxes are initially important attributes in candles, and subsequently in foods, cosmetics, and pharmaceutical industries for its formulated complexity and more desirable peculiarities in a mixture of systems (Endlein & Peleikis 2011, 2). It is extensively recognized that the application field of waxes depends on the quality and essences of a wax. Take, technical applications, for example, which includes coatings, candles, and detergents, the waxes used in such fields are not required a high quality and complicated process. Meanwhile, if a wax is utilized in food and cosmetic industries, it is certainly true that it must be ensured about quality and substances. The quality of a wax is evaluated according to its purity and composition that are determined by the botanical source and geographical location. (CBI Market Intelligence 2015, 2) For the sake of measuring the quality
of a wax, specialists and testers usually only have a look over the color to check whether it is a dark color which means the wax is contaminated (CBI Market Intelligence 2015, 3).

The table below indicates some benefits of natural waxes that have been used in cosmetics according to categories and subcategories. With many-sided concentrations, natural waxes are largely put to use in different segments, particularly in the skin care segment where natural waxes are used in different products.

TABLE 1. Cosmetics applications of natural waxes (CBI Market Intelligence 2015, 12)

<table>
<thead>
<tr>
<th>Segment</th>
<th>Sub-segment</th>
<th>Benefits of applying natural waxes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin care</td>
<td>Facial skin care, body care, lip balms, lip stick, sun care, anti-aging products, lotions, sun care</td>
<td>Emollient and skin conditioning</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Emulsions and thickening</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Solidifying</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Marketing potential for unusual or unique waxes</td>
</tr>
<tr>
<td>Hair Care</td>
<td>Shampoo, conditioner, hair cream, hair-styling products</td>
<td>Hair conditioning</td>
</tr>
<tr>
<td>Toiletries</td>
<td>Soap, deodorants</td>
<td>Moisturizing &amp; solidifying</td>
</tr>
<tr>
<td>Decorative</td>
<td>Make-up, lipstick</td>
<td>Emulsions and thickening</td>
</tr>
</tbody>
</table>

Natural waxes sustain a diversity of specialties that are commonly applicable to cosmetics industry such as oil gelling, lubrication, dispersing, and binding. Especially, the specified particularities of natural waxes are oil gelling, retention and viscosity building and structuring. As a result, natural waxes stimulate the change in different sensory profiles, skin textures, and even the surface gloss. (Endlein & Peleikis 2011, 3.) In cosmetics, the natural wax is characteristically natural and moisturizing skin feels, good skin adhesion and sensitive to heat, thus it is applied in diverse beauty products (see Table 1). Natural wax has the most potential to be exploited in skin care. (CBI Market Intelligence 2015, 12.) Beeswax and Candelilla wax are the most popular types of wax utilized in cosmetics (CBI Market Intelligence 2015, 2).

There are two typical types of animal waxes, including beeswax and shellac wax. Beeswax, which is freshly white and colorless, is well known as one of the best oil binding and oldest forms of waxes. Beeswax is quite sticky, plastic, kneadable, non-crystalline and considerably harder than other
waxes. Thanks to oil binding property, beeswax is used in lipstick, and lip balms in a creamy texture, which provides a good adhesion to skin. (Endlein & Peleikis 2011, 5-6.) It protects the skin through barriers by water-in-oil emulsifier it creates when melting in 61-65 degrees Celsius. What’s more, bee wax is also added to hold and shine in eyeliners, eye shadows, mascaras and blush for its texture enhancement and volume build-up function. (Aromatic Ingredients 2016, cited 21.9.2017.) According to Endlein and Peleikis (2011, 6), shellac is an exudation the insect that parasitic on trees, Laccifer lacca produces in mainly Thailand and India and its wax are viewed as a by-product of shellac. After experiencing an advanced absorption process, a refined shellac wax has a light color. The special characteristic of the wax is the high content of free wax alcohol with about 30 percent. For this property, shellac wax is accepted popularly in stick preparations and emulsions such as mascara. (Endlein & Peleikis 2011, 6.)

When it comes to vegetable wax, Carnauba and candelilla waxes are the most widely-used types in cosmetics. Carnauba wax is harvested and yielded from the leaves from the wild trees named Copernicia cerifera, which is a type of palm which grows in Brazil. Unlike other waxes, Carnauba wax is greatly hard, brittle, crystalline and contractors and particularly it melts at a high point of approximately 84 degrees Celsius. (Endlein & Peleikis 2011, 7.) Carnauba wax contains moderately fatty esters in its formulation. Thanks to its stiffness, gloss and slip applications, it is used generally-spread in mascara and hair cares and as an additive in lipstick and lip balm (Aromatic Ingredients 2016, cited 22.9.2017). Likewise, berry wax is also attributed by a great number of esters, which is soft and silky; therefore, it is popularly used as an additive in lipsticks, lip glosses, hair care and emulsion (ibid., cited 22.9.2017). In addition to giving classical emollient and creamy textures, berry wax also improves the break resistance of pencils. Berry wax is off-white colored, non-crystalline, and melts at a temperature of 30 degrees Celcius. Candelilla wax is harvested from the wild plant Euphorbia Cerifera, which is grown in the northern Mexican desert. The crude wax is brown-colored and the refined one is yellow, hard, little crystalline, and its melting point is approximately 72 degrees Celsius. Being composed of esters along with resins and sitosterols, the wax has an excellent oil binding property in lipsticks (Endlein & Peleikis 2011, 7.) Candelilla wax is an alternative for beeswax since it is completely vegan. Its gloss and hardness essence have been used in hair care and cosmetics. (Aromatic Ingredients 2016, cited 23.9.2017).

Besides the well-known natural wax above, there are some other types of waxes have been utilized in cosmetics. Rice bran wax is originally from rice oil by winterizing and chemically similar to sunflower wax in spite of different applications. The esters are the essential components of rice
bran wax generate the softness. (Endlein & Peleikis 2011, 8.) The wax is an alternative for Carnauba and Beeswax because of its lower stickiness. It is put into action currently in mascaras, lipsticks, lip balms, skin care and sunscreens. Ceresine wax, which is a mixture of microcrystalline and paraffin, is a thicken wax which helps to stabilize the oil level in emulsions and strengthen the adhesion of cosmetics. Green tea wax has capacity for active phospholipids, which are utilized as an excellent moisturizer, and antioxidant. (Aromatic Ingredients 2016, cited 21.9.2017.) Thanks to these characteristics, its applications are found in personal care and creams in skin cares. Moreover, Myrica fruit wax is also an ideal waxing type of natural and vegan cosmetics lovers. As other waxes, it helps to moisturize, shine and reduce adhesion of emulsions, for this reason, it is essentially used in hair conditioners (ibid., cited 21.9.2017).

3.3 Arctic berry wax

3.3.1 Value-added properties of Arctic berries for cosmetics

In Scandinavia, there are about 50 types of wild berries and around 37 of them are edible. It is estimated that 500-1000 tons of wild berries are available annually, but only 45 tons of them are picked and the rest is left in the forests. Arctic berries are wild berries growing in extreme conditions with the different temperature between day and nights (Wild Arctic Nature 2014, cited 26.9.2017). Northern areas where has long and light nights in the summer and dark and cold winters has favorable conditions for wild berries to produce ten times bioactive antioxidants and flavonoids (see figure 5) compared with cultivated berries. As Arctic areas are wilder, colder, purer, cleaner, and special-nature, arctic berries totally bring to people ‘a natural and healthy image’. (Invenire Market Intelligence 2008, 51.) It has been researched that on the grounds of these natural growing conditions, Arctic berries possess many substantial constituents such as phenolic compounds, seed oils, low energy content, high fiber level, a variety of vitamins and minerals, and low sodium content (Arctic Flavors Association 2014, cited 26.9.2017). For these properties, arctic berries are versatile, treasured and differed from other berries and as well as other fruits. Arctic berries’ core fundamentals including waxes, seed oils, fibers seeds, alcohol extracts, water and glycolic extracts have traditionally been practiced in food and cosmetics industries. Arctic berry solids such as seeds are commonly used as portions in exfoliation, skin care in natural and organic products. For the high ratio of antioxidants, extracts from arctic berries are especially ideal for beauty raw materials. (Invenire Market Intelligence 2008, 38.) Seed oils of arctic berries are also available for certified
organic ingredients, which is required to produce beauty foods, and supplement (Wild Arctic Nature 2014, cited 26.9.2017). As Arctic berries grow wild in forests, it is not too difficult to achieve organic certification (Invenire Market Intelligence 2008, 53).


Cloudberry, which grows in Lapland embracing primarily phenolic compounds, and the ellagitannins (see figure 5), flavanols and vitamin C (see figure 6), have conventionally been used for fever and scurvy treatment and skin cares. Water in cloudberry seed is usually extracted to manufacture as cosmetics’ composites. Arctic berries play an important role in cosmetic raw materials in as much as antioxidants, allergens, tolerance, and anti-elasticity. According to researchers, glycerol-water extracts from cloudberry encompasses the high-content polyphenol (see figure 5) and free – allergens acid (Larmo, Judin, Yang & Perugini 2012, 3). As a result, it is not only non-irritant to the skin and eyes but also actively works in antioxidant activity, whereby improving the vitality and radiance of skin. Another important research has studied the role of cloudberry seed’s extract inelastic activity for the sake of the presence of ellagic acid (Larmo, Judin, Yang & Perugini 2012, 4). Same as cloudberry, crowberry which grows in Arctic regions of Sweden is rich in antioxidants. For this feature, crowberry has been used to produce skin care to recover the skin from oxidative damages from radicals, UV light, and environmental pollutants. (Ecouna 2017, cited 26.9.2017.)
Along with cloudberry, cranberry is also a highly active subdivision in beauty products since it is filled with tannic acids which help to freeze bacteria. Besides purer antioxidants, omegas 3, 6, 9, and vitamin E (see figure 6) in cranberry are associated with the prevention of aging and regenerate the skin. (Ecouna 2017, cited 25.9.2017.) Hence, cranberry has popularly been found to produce facial exfoliating products to remove dead skin cells, and facial cream to reduce fine lines, nourishing and renewing radiance (Schaefer 2008, cited 26.9.2017). Another typical type of arctic berries is Finnish lingonberry which involves a small percentage of energy and vitamin C (see figure 6) but a significant amount of vitamin E (see figure 6), quercetin and pro-anthocyanidins, catechins and polyphenols. Particularly, the content of Resveratrol in red wine, dark grapes can also be found in lingonberries. Besides, it is known as the natural preservative on account of benzoic acid helping to boost skin regeneration and improve the skin’s elasticity. (Arctic Flavors Association 2014, cited 26.9.2017.) Lingonberry extract is also active in whitening effect to the skin by arbutin which inhibit melanin production (Oryza Oil & Fat Chemical Co., Ltd 2009, 4-5). Bilberry which has a crop of 100-300 million kilograms annually is also a typically Finnish type of berry, and its average is 184 million kilograms but only 10 percent of which is harvested. Bilberry is contained in a significant proportion of fiber, vitamin C (see figure 6), anthocyanins and phenolic acids. (Arctic Flavors Association 2014, cited 26.9.2017.) These compounds help to retain the skin’s elasticity and suppleness through balancing oil.

3.3.2 Strengths and weaknesses of Arctic berry wax

Owing to the limited availability of information related to the berry wax, a private message was sent to a Master of Sciences at the University of Oulu under the authority of obtaining the unpublished data concerning the wax. Having studied about the wax, the person has a solid background of the marking specialties which affect partly to cosmetics applications. On the basis of the answered issues, those distinctions have been indicated and analyzed as seen from Table 2. The nature mentioned are the major components contained in the wax, its advantages bring to the skin, the lifespan and what side effects it can trigger to users.

**TABLE 2. Some Arctic berry wax characteristics**

<table>
<thead>
<tr>
<th>Text</th>
<th>Key words</th>
<th>Category</th>
<th>Content analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;We then made a composition analyses for these in Latvia which showed that 50%+ of the extracts are composed of linoleic- and gamma-linoleic acid.&quot;</td>
<td>Linoleic acid (LA)</td>
<td>Ingredient</td>
<td><strong>Concept:</strong> a polyunsaturated omega-6 fatty acid and found in many vegetable oils (Wikipedia 2017, cited 5.12.2017).</td>
</tr>
<tr>
<td></td>
<td>Gramma-linoelic acid</td>
<td></td>
<td><strong>Main properties:</strong> anti-inflammatory, acne reduction and moisture retention.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>Applications:</strong> emulsifier, soaps and drying oils.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>Side effects:</strong> no, safe for use in cosmetics products. (Truth in Aging 2017, cited 5.12.2017.)</td>
</tr>
<tr>
<td>&quot;Other fascinating compounds could be various terpenes and terpenoids, especially lupeol, terpenes and terpenoids.&quot;</td>
<td>Terpenes and terpenoids</td>
<td>Ingredient</td>
<td><strong>Concept:</strong> a large and diversified class of organic</td>
</tr>
</tbody>
</table>
which is said to have anti-inflammatory properties similar to common NSAIDs."

<table>
<thead>
<tr>
<th>(vitamin A), lupeol</th>
<th>compounds and found in living organisms.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Main properties:</strong> anti-inflammatory, fragrances, perfumes preparation.</td>
<td></td>
</tr>
<tr>
<td><strong>Side effects:</strong> depress, respiratory disorders if using increased quantities. (Kandi, Godishala, Rao &amp; Ramana 2015, 8-10.)</td>
<td></td>
</tr>
</tbody>
</table>

"Lifespan is also a bit difficult to answer, but at least for now the waxes are 6 months of and seem to be in good condition.

<table>
<thead>
<tr>
<th>At least 6 months</th>
<th>Lifespan</th>
</tr>
</thead>
<tbody>
<tr>
<td>It is quite short seeing that the lifespan of a cosmetics product must guaranteed for at least 30 months in Europe (Sakamoto, Lochhead, Maibach &amp; Yamashita 2017, 139).</td>
<td></td>
</tr>
</tbody>
</table>

"I can only answer that at least the few times I have managed to use this on my hands, there was no irritation or reaction. I have no understanding whether some people can be allergic to acidic creams."

<table>
<thead>
<tr>
<th>Adverse side effects</th>
<th>Skin effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>There have been currently no adverse effects on the skin. Yet, it is suggested to conduct more researches and tests in practice with participation of cosmetics firms prior to summarizing.</td>
<td></td>
</tr>
</tbody>
</table>

Arctic berry wax can be used in ubiquitous natural cosmetic products: lipsticks, lip glosses, balms, pencil, mascara, make-up, skincare and hair cares (Kahlwax 2011, cited 26.9.2017). The berries grow in especially severe conditions and they comprise varied nutrients and a high content of extracts that are beneficial to the skin. It is undeniable that Arctic berry wax is totally vegan. It is normally recognizable that natural waxes are polluted by pesticides (Heinrichs, Lukasch, Michaelis, & Lachmann 2006, 5). By contrast, being produced from wild berries, Arctic berry wax is less
contaminated and irritant to the skin. Notably, unlike synthetic alternatives, the wax is derived from sustainable natural resources, thus to reduce carbon dioxide emissions and lead to environmental friendliness. The berry wax has been researched and extracted from industry side streams and it can be economically refined, thereby its price is expected to be more affordable than the existing berry waxes in the market. Containing complex terpenes and terpenoids, especially lupeol, the wax reproduces anti-inflammatory complexity that similar to common NSAIDs-nonsteroidal anti-inflammatory drugs (Sundqvist, P & Ahola, H 2017, e-mail message). Arctic berry wax is same as other types of berry waxes that give a conspicuously silky and soft feeling to the skin. Particularly, it can be valued as an excellent additive for oil gels. (Endlein & Peleikis 2011, 8.)

The leading disadvantage of Arctic berry wax is certainly the adhesion and persistent of make-up on the skin that will annoy consumers if applying wax-based cosmetic products. According to Endlein and Peleikis (2011,8), although berry wax is soft, its texture is quite heavy which is significant in creams. It is also admitted that the natural wax is required to distribute in a good condition with a stable composition at a certain time (Arraudeau, Patraud, & Le Gall 1989, 2). Similarly, Arctic berry wax is only restored in limited time, which leads to difficulties in supplying chain of manufacturers and distributors. Arctic berry wax has a lifespan of at least 6 months to be in good condition. (Sundqvist & Ahola, e-mail message.) Although the price of Arctic berry wax would be affordable, it has been still higher than other waxes and domestic materials for cosmetics. Particularly, the prices are even so much cheaper for those raw materials importing from China that have become an emerging wax exporting country currently (CBI Market Intelligence 2015, 6).
4 MARKET ANALYSIS IN THE UNITED KINGDOM

4.1 Overview of cosmetics industry

Cosmetics market in the United Kingdom is the second largest markets in the Europe area, following Germany (Cosmetics Europe 2016, 14). It valued around £9.5 billion in 2016 with only 0.1 percent increase compared to 2015 and it is forecasted to be worth £17 billion by 2020 (CTPA 2017a, 28; Hardy 2016, cited 26.9.2017). Manufacturers, distributors, wholesalers, retailers and suppliers account for approximately 80 percent of value in the UK market in finished cosmetic products (CTPA 2017b, cited 26.9.2017). There were about 1000 enterprises involved in the wholesale of cosmetics in the UK in 2015 (Cosmetics Europe 2016, 18). Supermarkets and hypermarkets maintain continuously its leading role as distributors of beauty and personal cares. Meanwhile, domestic manufacturers have faced with difficulty due to the lack of presence of baby care, bath, shower, deodorants and oral cares. (Cosmetics Europe 2016, 17.) Even though there is a quite positive presence, cosmetics and fragrances of domestic manufacturers still struggle with international brands in high-competitive markets. This causes the closeness of many manufacturing plants of several globally sizable companies in the UK during recessions. Regarding cosmetics manufactures in the UK, the size is relatively smaller for both key players and new entrants in comparison with the global cosmetics industry (King 2013, cited 26.9.2017). According to Euromonitor (2014, 6), there are nearly 450 small and medium enterprises (SMEs) operating in cosmetics manufactures in the UK, which is also the third largest market in the EU for SMEs (Cosmetics Europe 2016, 6).

The graphs (see figure 7 and figure 8) represent the values of exporting and importing of the UK to the world by categories in 2016. Cosmetic exporting and importing markets of the UK grew by respectively 13 percent and 13.1 percent in 2016. The EU, which is the largest trading partner of the UK (see figure 7), accounts for 66.2 percent of export markets and 67.1 percent of importing markets throughout the world. Its loyal trading partners in Europe include Irish Republic, Germany, and France. Within Non-EU markets, the United States is the second largest import market and third largest export market (see figure 7). (CTPA 2017a, 6.) As regards cosmetic categories, skin care and perfumes constituted the greatest proportion of cosmetic products (see figure 8) exported and imported to other nations (CTPA 2017a, 31).
FIGURE 7. UK exports and imports worldwide in 2016 (CTPA 2017a, 6)

FIGURE 8. UK Exports and Imports World Wide by Category (£ million)

Cosmetic products are classified into five groups: toiletries, haircare, skincare, color cosmetics, and fragrances. According to Figure 9, skin care and toiletries are the leading groups in the market shares with 46 percent. Notwithstanding, color cosmetics group that was quite resilient in some
previous years has experienced the fastest growth of average 5 percent in market share, reaching a value of £1.6 billion in 2016 (My News Desk 2012, cited 26.9.2017). Noticeably, the sales of make-up such as eyeshadow, mascara, and nail polish increased dramatically with the double-digit growth of £110 million in 2014 (Hardy 2016, cited 26.9.2017). The make-up sector is considered stable despite economics recession for many years since women expect and desire to look charming and confident when going out. Amongst decorative cosmetics sector, mascara and nail cares are the fastest growing segment, in comparison with other cosmetic products such as lipstick or lips balm, cosmetics users usually wait several months to purchase the new one. (My News Desk 2012, cited 26.9.2017.) Within skin care and color cosmetics, the sales of premium and luxury goods saw the fastest growth in 2015 and 2016, and this trend is likely to continue in the future (Aidin 2014, cited 26.9.2017).

![Sector Shares (%) of Category 2016](CTPA 2017b, cited 26.9.2017)

It has been found out that the age impacts reasonably on the patterns of cosmetic expenditure and this is proved through Figure 10. It can be seen that the older people tend to spend more on cosmetics than the younger. The young customer segment is women aged 18 to 34, who are likely to purchase annually over 10 different types of cosmetic products (Shapouri 2016, cited 26.9.2017). Meanwhile, women aged over 45 accounts for more than 40 percent of cosmetic markets in 2015 (see figure 10) and it is expected to grow by 38 percent from 2015 to 2035 (Aidin 2014, cited 26.9.2017). Particularly, the group of consumers aged over 65 is likely to spend approximately £2 billion annually on personal skincare and toiletries, which is a triple as the figure for women aged 19-24 and the figure is estimated to grow sharply in the future (Cosmetics Europe 2016, 9). Those consumers are willing to purchase more sophisticated formulated and multifunctional commodities as well as greener cosmetics (King 2013, cited 26.9.2017).
4.2 Trend of natural cosmetics

Despite accounting for a small proportion in the total value of the market, natural cosmetics is a rapid developing section in the industry with 15 percent in 2017, meanwhile, the whole market rose by only 5 percent overall (Jones & Dürbeck 2008, 2). It is not difficult to notice that together with Germany, France, and the USA, the United Kingdom is one of the fastest markets of natural cosmetics for both supplying and demanding markets. Within different groups, skincare is the most common segment in this market, making up half of the total sales of natural beauty goods. It is transparently realized that organic segment is more increasingly popular than other natural cosmetic products in the UK. Particularly, the cosmeceutical outputs, which is involved by bioactive mixtures, has grabbed the attention of beauty lovers. According to Organic Beauty and Wellbeing Market Report, the sales of organic products saw a dramatic growth of 20 percent, reaching to £61.2 million in 2016 (Professional Beauty 2017, cited 27.9.2017). The revenue of selling certified organic category has also increased by 13 percent in 2016. In a report of Soil Association, about 43 percent of UK cosmetics consumers are looking for a certification for organic and natural beauty products (Beauty Serve 2017, cited 27.9.2017). Natural cosmetics has grown dramatically with the introduction of new eco-ethical type as well as new natural and organic offerings in order to meet customer tastes and expectations (King 2013, cited 27.9.2017). This market is also expected to
continuously grow for the innovation of new raw materials, skin physiology and increasing consumer demand.

British consumers tend to be more and more concerned about the combined elements in cosmetic products, which may trigger adverse side effects by some artificial substances such as parabens, petrochemicals, and toxins (Bogan 2017, cited 27.9.2017). This leads to the fact that they are likely to move towards healthy lifestyles and sustainability, resulting in the sharp growth of purchasing natural and organic skin care that is green-approached. This is evident in the case of 42 percent of British consumers purchasing natural and organic beauty products in view of friendliness to the environment (Beauty Serve 2017, cited 27.9.2017). Another good illustration is that 50 percent of British men seeking natural factor in facial skin cares (Cosmetics Business 2016, cited 27.9.2017). Cosmetics customers are interested in natural wax that is odorless. They prefer those waxes without the scent except for beeswax. (CBI Market Intelligence 2015, 3.) It is interesting that currently cosmetics consumers have been interested in exotic fundamentals for both new and existing waxes such as myrtle, mimosa, green tea, jasmine, rose, lotus and orange blossom waxes (CBI Market Intelligence 2015, 6). Those flower and leaf waxes retain exceptional virtues, but they are unfortunately limitedly- available (Endlein & Peleikis 2011, 8).

Together with changes in customer purchase, the movement of SMEs towards natural market has also emerged in recent years, this trend occurs in both investment and distributions. The majority producers of natural cosmetics in the UK are giant multi-national companies and involved in pharmaceuticals, chemicals sectors (Jones & Dürbeck 2008, 9). The presence of retailers and manufacturers contributes remarkably to the wider popularity of natural cosmetics through the channels of the availability of natural outputs. Notwithstanding, nowadays beauty retailers are more concerned in the expansion of the ranges of natural and organic cosmetic goods due to the fact that the majority of sales are from health food and organic food stores (Jones & Dürbeck 2008, 8). Another significant aspect of the natural market growth is the investment, which has increased sharply by reason of its margins. This is certainly true in the case that there are a rising number of private sectors investing in natural cosmetics enterprises, as well as organic food producer seeking opportunities to enter this market (Jones & Dürbeck 2008, 2). The UK has become the target market for many international companies in recent years.
4.3 Market Analysis

4.3.1 Political

Political stability
There is no doubt that politics within the UK is relatively stable, which is favorable for an enterprise operating or entering this market (Erlancer 2017, cited 27.9.2017). However, from the vote for Brexit, the political situation has changed appreciably when some struggles, protests towards the divided nation (Brinded 2016, cited 27.9.2017). This has led to the contemporary unstable status of politics and society of the UK. Distinctly, the law and regulations in the UK are not identical to the individual region within this country develops their own policies, those regions include England, Scotland, Wales and Northern Ireland (Wikipedia 2017, cited 27.9.2017). As a result, companies and organizations must comply with the rules according to the regions they want to enter and operate their businesses.

Cosmetic regulations
Despite leaving the European Union, the UK still maintains the EU wide safety regulations including the cosmetic category. According to the regulations, cosmetic products are required to comply with legal accepted composition and label; all information about the origin must be recorded in documents; all outputs must be ensured not out of expiration (Southwark Council 2015, 1). There is a list of over 1300 banned ingredients in cosmetics in European area as well as certainly in the UK; hence, before selling the manufacturers must disclose all the components on an EU database. For instance, chlorine, cyanides, iodine, mercury, mercury compounds, hydroquinone, and corticosteroids, which have whitening function. Likewise, cosmetic commodities containing Clobetasol Propionate, Betamethasone, Betamethasone Dipropionate are also prohibited in sales as well as supply. (Southwark Council 2015, 2.) There are more than 250 common types permitted to use in limited amount and required to add a warning and marked as precautionary (Southwark Council 2015, 3). Despite this, some certain substances are permitted to be used in cosmetic goods such as colors, UV-filters and preservatives (BIS 2010, 2). If any cosmetic products are not in conformity with the regulations, the responsible company is fined up to £20,000 and the responsible person is imprisoned up to 12 months (Southwark Council 2015, 4).
All cosmetic product must be undergone a safety assessment to produce a legal safety report that is recorded in ten years. To be certified as safe, the safety assessment is carried out by cosmetic experts with toxicology qualifications or other relevant formal qualifications. (Southwark Council 2015, 3) Through this process, all the detail information such as ingredients, manufacture, health effects must be documented. It is mandatory not only to report all side effects and negative reaction after testing to the authorities but also to publish all the information to the buyers. (BIS 2010, 28.)

As normal, fragrance and aromatic compositions do not need to be declared, but some additives must be labeled such as flavors or essential oil considering special rules (BIS 2010, 13). The documents about supplies must be stored to inspect anytime in three years from the date products are supplied (Southwark Council 2015, 1). It is required to submit all information in respect of those to the European Commission through the Cosmetic Products Notification Portal before introducing them to the markets. In the case a cosmetic product does not adhere to the regulations, it must be withdrawn or recalled immediately. (Southwark Council 2015, 4.)

The most important regulation impacting on natural cosmetics is certainly animal testing that has been officially prohibited in the UK. The Cosmetic Directive aims at abandoning safe testing ingredients and finished cosmetic products on animals, but in some certain circumstances it is still contemplated (Hawthorne 2015, cited 27.9.2017). In addition to banning testing mixtures and finished products on animals, the regulations also ban the supply of those which have been tested on animals outside the Europe (BIS 2010, 9). It is completely illegal to test on animal particularly tests with respect to repeated-dose toxicity, reproductive toxicity, and toxicokinetics (BIS 2010, 10).

The UK also enacts some strict rules to protect the environment through restriction of disposal and taxes on industrial waste. Recently there is no forces or official ban on microbeads in the UK cosmetics industry, but there are still some campaigns operated to persuade cosmetics manufacturers and businesses to remove those particles on sales in this country (Hawthorne 2015, cited 27.9.2017). This case can be seen in sales of several giant players such as Unilever or L’Oreal, which have phased out microbeads from their commodities.

**Business Taxation**

When mentioning political factors, business taxation exerts a major influence on the cosmetic industry. A small change in the corporate tax rate will result in an immediate effect on the business cash flow and thus it leads to the increase or decrease in profits of corporates. In addition to corporation tax, other business taxes which also impact on business income and capital gains include withholding tax, value added tax, stamp duty, stamp duty land tax and national insurance
contributions. Fortunately, corporate capital tax, branch remittance tax, excess profits and alternative minimum tax has been currently not imposed in the UK. (Deloitte 2015, 9.) The table (appendix 1) illustrates some quick tax facts for companies so that readers will have a general outlook on corporate tax in the UK.

4.3.2 Economics

The greatest change in British economy nowadays is the undeniably Brexit vote, which triggers an uncertain economic climate to the country. Firstly, it has depreciated the value of sterling in the foreign exchange in the currency market, as a result, higher prices of cosmetic components and goods although there has been still no import and export tariffs. Secondly, after 3 years when the UK is completely separated from the EU, prices of import raw materials and finished products are likely to increase more dramatically for the drop of British Pound Sterling. (Formula Botanica 2017, cited 28.9.2017.)

It is estimated that after the Brexit cosmetic retailers will see a dramatic reduction in their value sales in most classes of products (see figure 11), especially for high-end cosmetics. Importantly, now that both high operational costs in the UK and increasing prices, the premium products will experience the hardest difficulty among cosmetic category, which increases the severity of the competitiveness of this market (Micallef 2016, cited 29.9.2017). This difficulty is even worse for the mid and low-end customer segments as long as the groups of customers who have medium or low monthly incomes are elastic consumers in this market. In comparison, higher-class consumers can still afford for the premium class, regardless of economic recessions.

---

The statistics (appendix 2) illustrate that the unemployment rate in the UK almost remains at a low point, around 5 percent during the period from 2017 to 2021. This will strengthen the purchasing power of buyers, who are likely to change their buying habits, transferring from low-end cosmetics to high-end and luxury division. Being unemployed people tend to spend less money on unnecessary goods like cosmetics compared to employed ones, businesses will generate higher profits when the unemployment rate is low. This also leads to the low risk of bankruptcy for organizations and companies, particularly premium-group manufactures. To put it another way, more opportunity doors open in the cosmetics business, especially premium and luxury segment.

As can be seen from the chart (appendix 2), the GDP growth rate of the UK is forecasted to decrease from 2017 to 2020 from 2.05 percent to 1.9 percent. It is undeniable that since economic growth depends basically on the growth of gross domestic product (GDP), the UK economy has experienced a light downturn trend recently. Despite a small decrease, this negative figure provides a slightly negative outlook for businesses and organizations operating in this country. It is estimated that there is a high chance these businesses will face lower revenues in the next few years. Further seriously, this can lead to the close-down of some businesses and manufacturers when the competition of cosmetic industry has already been greatly high in this country.

When operating a business in a country, businesses and organizations should take interest rate into consideration. According to Statistic report (appendix 2), the interest rate in the UK is expected to increase slowly from 0.3 to 1.1 percent over the period between 2017 and 2022. By cause of the high-interest rate, companies and organizations will be discouraged from taking credit to expand their businesses and implement strategic plans. The higher interest rate, the fewer people borrowing money from the banks to spend on goods. Accordingly, consumers have little disposable income to spend on particularly non-necessary group such as cosmetics.

4.3.3 Social

Customers purchasing cosmetic products in the United Kingdom range variedly from teenagers to the elderly. In 2016 the UK population over 55 reached to nearly 30 percent and this aging population is the most influencing group on the cosmetic market of all demographic changes (Indexmundi 2017, cited 29.9.2017). The fact explains why the anti-ageing effect has become a must-have claim in facial skin care recently and it will be increasing significantly in the future.
Meanwhile, this group is also the major consumers in the natural and organic cosmetics sector. (Euromonitor 2011, cited 29.9.2017.) Female accounted for 54 percent of the whole population and they buy more different cosmetic products with natural claims compared to male. (Indexmundi 2017, cited 29.9.2017). Women are the target group of the cosmetic industry, particularly over 45-aged women who are conscious of their physical appearance. There is a growing trend in middle class, who are willing to buy more luxury sections in which category most natural cosmetics are. This will give the positive outlook to natural and organic cosmetics which is almost high-priced and high-quality.

There is a rising number of consumers aware of the side effects of cosmetics products for using artificial substances. Consequently, they are likely to look for commodities do not harm to not only their skin but also the environment and community (Bogan 2017, cited 29.9.2017). For instance, 42 percent of consumers buy natural products on the grounds that they believed they are better for the environment (Beauty Serve 2017, cited 29.9.2017). According to statistics, about 53 percent of parents buy organic and natural lotions as to 34 percent of couples without children (Bogan 2017, cited 29.9.2017). This figure is even much larger when they consider buying products for their children. It is also noticeable that cosmetic users are less interested in natural cosmetics with a heavy scent, particularly in wax-based products (CBI Market Intelligence 2015, 3). Additionally, British become more concerned about their health through diet and well-being, and consequently, they change their cosmetic products to the natural and organic ones. Besides, consumers in this country have leveraged much knowledge about the combinations in cosmetics, whereby they can recognize what types are natural and good for their skin. Another concern is the air pollution, which leads to the growth in sun cares and the launch of antipollution cosmetics in the UK (Euromonitor 2017, cited 29.9.2017). The Vegan Society estimates a growth of triples in the number of vegans in the country in ten years from 2016 to 2026 (Stephenson Personal Care 2017, cited 29.9.2017). Therefore, it is undisputed that they are likely to be more interested in cosmetics containing vegetables and fruits such as Arctic berry wax that is less contaminated and irritant to the skin.

4.3.4 Technology

As the key driver in this industry, there is no doubt that technology era stimulates largely the sustainable development of the cosmetics industry (King 2013, cited 1.10.2017). In cosmetic sector, patent activity plays an important role in cosmetics innovations (Cosmetics Europe 2016,
There has been a range of advanced technologies introduced in recent years and the impressive innovations are nanotechnology, biomimicry in cosmetics, novel extraction techniques, stem cell technology and advances on biopolymers (GCI Magazine 2012, cited 1.10.2017). Testing new bioactive and antimicrobial products play a critical role in natural cosmetics. This process is conducted by growing cultured cells through special media and evaluating bacteria inhabitation of antimicrobial composites. This approach helps to reduce the risk of microbial contamination and incompatibility with other constituents. (Lewis & Yeomans 2017, cited 1.10.2017.) With respect to research and development, new technologies allow scientists and researchers to create more natural formulations. It can take more than 5 years of research and development to the introduction of a new formulation of products to the market (Cosmetics Europe 2016, 26). Researchers can easily identify materials in connectivity mapping through an element bank, algorithms and data crunching. The technology transparency from synthetic additives to natural and active elements has become emerged broadly. Similarly, there is a trend of investment in ecological technology in manufacture chain so that businesses and organizations can reduce the waste disposal. Thanks to the development of technological innovations, producers and formulators can partly address the current instability of biological factors.

Technology is not only the key forcing driver in the development of new cosmetic products but also motivates the purchase behavior of consumers and businesses through online distribution and social media. The development of online shopping has become the most influencing factor in the purchasing methods nowadays, and cosmetics industry particularly. Customers are able to buy cosmetic products and retailers are able to deliver flexibly via the app and online devices (Cosmetics Europe 2016, 29). Thanks to e-commerce, companies easily find out the raw materials suppliers as well as goods distributors around the globe rather than wasting their time on long distance. However, the foremost question to tackle is how to offer customers the same real-life experience online as they are shopping at stores. Many giant players in this industry have partnered with technology companies to innovate digital technology which replaces the in-store make-up experience. Take, L’Oreal, for example, the company has developed Makeup Genius, a beauty application, providing a virtual mirror which customers can try on makeup without going shopping at stores. (Curtis 2014, cited 1.10.2017.) Social media has been associated extensively to the demand and purchasing decision of customers. It is evident that most customers have watched tutorial videos by bloggers or read reviews from bloggers and celebrities before buying and applying products (Hardy 2016, cited 1.10.2017). Thereby, many brands are trying to connect with their
customers through social networks such as Snapchat, WhatsApp, Facebook Messenger (Mintel 2014, cited 1.10.2017).

4.4 Competition analysis

4.4.1 Competitive rivalry

It is claimed that because natural cosmetic consumption is increasing quite gradually in the UK and it accounts for a small percentage in the market share, the intensity of rivalry is relatively high. Furthermore, there are familiar existing competitors (see Table 2) on the markets and well-known with affordable-priced organic and natural cosmetics. For example, Dr.Hauschka which has 50 years of experiences in natural cosmetics and offer skincares which are committed to 100 percent natural and organic. Dr.Hauschka is one of the most popular brands in natural cosmetics not only in the UK but also in most European countries. There is a variety of popular organic and natural cosmetic brands such as Yves Rocher, The Body Shop, Weleda, Pai, Trilogy, Faith in nature and Bently. On the question of wild berries, several cosmetic sellers (see Table 3) in the country have brought into their offerings such as Éminence with Arctic berry peptide radiance cream, Skyn Iceland with berry lip fix, Flow Cosmetics with Arctic berry body butter. Yet, the number of those companies is extremely small, and thus businesses expecting to access to the market with Arctic berry-based products have a lot of opportunities to succeed.

TABLE 3. Popular natural cosmetic brands in UK

<table>
<thead>
<tr>
<th>Brands</th>
<th>Product</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Body Shop</td>
<td>Make up, skincare, haircare, fragrances, body care, shower</td>
<td>Slightly expensive price</td>
</tr>
<tr>
<td>Dr.Hauschka</td>
<td>Facial care, body care, make up, bath and shower</td>
<td>Slight expensive price</td>
</tr>
<tr>
<td>Yves Rocher</td>
<td>Make up, skincare, haircare, body care, fragrances, shower</td>
<td>Average price</td>
</tr>
<tr>
<td>Weleda</td>
<td>Body care, facial care, haircare, oral care</td>
<td>Low price</td>
</tr>
</tbody>
</table>
Estelle & Thild  
Eco-organic skincare and body care for baby and child


<table>
<thead>
<tr>
<th>Brands</th>
<th>Products</th>
<th>Categories</th>
<th>Pictures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Éminence</td>
<td>Arctic Berry Peel &amp; Peptide Illuminating System (£240)</td>
<td>Facial care</td>
<td><img src="#" alt="Pictures" /></td>
</tr>
<tr>
<td></td>
<td>Arctic berry peptide radiance cream (£57.60)</td>
<td>Facial care</td>
<td><img src="#" alt="Pictures" /></td>
</tr>
<tr>
<td>Skyn Iceland</td>
<td>Berry Lip Fix (£12)</td>
<td>Lip balm</td>
<td><img src="#" alt="Pictures" /></td>
</tr>
<tr>
<td>Flow Cosmetics</td>
<td>Arctic berry body butter (£31.60)</td>
<td>Body care</td>
<td><img src="#" alt="Pictures" /></td>
</tr>
<tr>
<td></td>
<td>Bilberry Facial Cleansing Balm (£29)</td>
<td>Facial care</td>
<td><img src="#" alt="Pictures" /></td>
</tr>
</tbody>
</table>
Natural wax is rather well-known in the cosmetic industry, but Arctic berry wax still accounts for a small proportion of cosmetics application (CBI Market Intelligence 2015, 5). The basic competitors of Arctic berry wax on the natural cosmetic market is undoubtedly the plant wax. The two major natural waxes in natural cosmetics market in the UK are Carnauba wax and Candelilla wax, which are sourced respectively in Brazil and Mexico. Although these waxes have been outsourced to distant countries, the cost is still regarded lower than Arctic berry wax considering its large availability. Besides, there are some other common vegetable waxes such as rice bran wax, apple wax and jojoba wax. The popularity of synthetic waxes nowadays has increased the competition level as it is considerably more affordable compared to Arctic berry waxes. Likewise, the cost of new mineral waxes is now not only so much lower but also able to be used in cosmetics. (CBI Market Intelligence 2015, 6.) Prior to lower cost of supplying and producing, the cosmetic goods are more attractive to low and medium groups of customers. Another important competitor of Arctic berry wax is certainly beeswax, which is the most common constituent for cosmetics, accounting for 30-40 percent of the worldwide cosmetics. Yet, for natural and organic cosmetic users, they tend to refuse using beeswax-based products.
4.4.2 Threat of new entrants

On the one hand, prior to becoming trendy nowadays, the natural cosmetic sector is likely to appeal many new entrants striving to enter the markets, especially in the UK where natural cosmetics become more popular. This situation leads to the threat of lower revenue gains for current players, and the reduction of profitability. However, new firms face considerable challenges, particularly in an ambitious industry like cosmetics. The greatest barrier for new entrants is certainly the high cost of operating. As a result of the fact that there have been a variety of well-known existing cosmetics on the market, new businesses have to offer an extraordinary product in pursuance of grabbing the attention of potential customers. Hence, it is unquestionable that an innovative idea requires a huge financial resource. Another threat new entrants have to take into consideration is the presence of reputative brands that come along with natural products such as Dr.Hauschka, Yves Rocher, Trilogy, and Origins. Consequently, the competition requires a generous budget of marketing to attract the loyal customers of those strong players. New entrants also cope with difficulties in negotiating prices with distributors, wholesalers, and retailers to access to the markets through expected distribution.

On the other hand, as the United Kingdom is an attractive and potential market for natural cosmetics, international firms and overseas companies are likely to capture a domestic market share. Due to the overspread popularity of natural ingredients in cosmetics, some companies and manufacturers are seeking out more novel and exotic raw materials. Cosmetics producers expect a new range of waxes as well as established ones (CBI Market Intelligence 2015, 2). This stimulates the investment of businesses in researching more natural fundamentals for cosmetics with the aim of producing innovative cosmetic goods with typical values. It is evident that more and more Nordic companies are accessing the UK market with their offerings that have peculiar practices from Arctic berries’ seeds, oil, and leaves. Not only facing a high threat of new entrants, but natural cosmetic companies also compete with foreign businesses and existing brands striving to produce new commodities from unrivaled constituents.

4.4.3 Threat of substitute

The demand for natural compounds is expected to continue, leading to a diverse range of raw materials which can be alternative to Arctic berry wax. The most opposing substitute is certainly
vegetable oils and fats. The United Kingdom consumes mainly grape, palm, linseed, soy and sunflower seed oils which can be produced domestically. Another noteworthy butter such as shea butter, and illipe butter that is frequently used in lips balm and body lotions. As a result of the increasing demand for organic-certified cosmetic products amongst British, organic vegetable oils have become available and spread on the market, argan oil as an example. (Jones & Dürbeck 2008, 12-13.) Nonetheless, some categories are acknowledged premium and luxury for its high cost such as sea buckthorn oil. For this reason, manufacturers have produced more organic compositions in line with each target group so that they can reach to potential consumers.

Essential oil is one of the prominent substitutes for Arctic berry wax in natural cosmetics since it is quite lower priced and more consistent. The emergence of fruit-based makings in cosmetics has become grown sharply such as grapefruit, citrus, and lemon oils and those are only satisfactory to supply within a continent in virtue of their short lifecycle. Take, peach kernel oil and pomegranate seed oil, for examples, which has been developed in skin care market and the burgeoning anti-aging products. (Jones & Dürbeck 2008, 10.) However, as a consequence of being quite rare and produced in small quantities, and relatively new to the market, cosmetic products made of those ingredients are still unreachable for most customers. Flower oils are also another choice of alternatives to Arctic berry wax, such as lavender, rose, and orchid oils (Endlein & Peleikis 2011, 8). The fundamental reason why the prices are rather high is that they are almost outsourced or produced outside the Europe, for example in Asia and southern America.

Regarding overall cosmetic industry, the primary substitute of Arctic berry wax-based products is normal cosmetics with chemical additives. It is certainly true for consumers who do not care about environmental friendliness and side effects of cosmetics because they do not have sensitive skin. Unfortunately, as a result of the fact that there are changeable options of chemical composites-based products on the markets, it becomes easier for consumers to find a product replaced for natural ones. In fact, those products are even more affordable and the functionality of them remains the same as natural and organic products. Therefore, building a brand with natural identity and spreading the significance of using natural cosmetics contribute to preventing changes in customer buying habits.
There are many suppliers and manufacturers in the UK nowadays and the figure is, even more, greater within Europe. There have been currently not many Arctic berry wax-based products in the cosmetics industry. The reasons lie in limited availability every year and the technology system to produce the wax. This leads to the possibilities of suppliers and manufacturers to control the supply. Although Arctic berries grow in a specific area, it can be dried and stored in a good enough condition to supply as raw materials for manufacturers. It is believed that the berry waxes are easily supplied outside the country, especially in the Nordic countries and it is likely to be more affordable than domestic supplies; moreover, there is no trading tariff and taxes within the European area. There is a diverse range of natural and organic ingredients that can be alternatives for the wax. Similarly, the number of suppliers and manufacturers is also high and in large scale. For those reasons, berry wax suppliers in cosmetics market have less power in the British market, this results in the low potential to raise the price. In other words, the natural cosmetics sector in the United Kingdom has a low bargaining power of suppliers. The businesses will be in better position stemming from having more options of suppliers rather than complying with one monopoly supplier.

However, it is admitted that suppliers with certified elements may have a certain power to bargain the prices with companies. It is due to the fact that natural cosmetic consumers pay more attention to those certificated. The competition is strikingly high in the cosmetic market, every company strives to seek quality materials and products on the part of generating a competitive advantage compared to its competitors. For this reason, they tend to put their priorities and preferences on reliable and reputable suppliers which offer certified and quality materials. Particularly, certification has become one of the required standards in the safety regulations for some certain combinations in recent years in the UK. For instance, Estelle & Thild requests its vendors to supply only quality and certified cosmetic basics with a view to meet the expectation and satisfaction of its customers, who require truly organic products. (Zotova, Pellonpää & Ozhogina 2012, 66.) It is quite important and necessary for cosmetics companies to co-operate and build a close relationship in the long term with those producers and suppliers.
4.4.5 Bargaining power of buyers

The purchasing power of customers who are interested in cosmetics containing Arctic berry wax is quite low in the UK as there have not been many brands in this country selling this type of cosmetics recently (see chapter 4.4.1). It has been researched and found out that the cosmetic market in the UK is the second largest market among European countries (see chapter 4.1). For this reason, the concentration of buyers on British cosmetic market is remarkably high. There are a lot of substitutes for consumers to easily switch to other additives-based products rather than Arctic berry wax (see chapter 4.4.3). To put it another way, it may not require consumers to pay an excessive cost to change cosmetic products. The situation forces manufacturers and companies to decrease their output prices since cosmetic customers have been holding a high bargaining power on the market. Additionally, as customers are able to be flexible in switching products, producers and sellers in the country cannot predict and estimate their future demands. As a result, the target profitability of companies for a long run may not be achieved. Nevertheless, the number of British consumers expecting and desiring distinguished compounds in natural cosmetics is growing gradually; hence, bargaining power of customers tends to be lower in the future.
5 INTERVIEW OF THE CASE COMPANY

5.1 Research methods

The term ‘qualitative research’ is defined as a scientific research approach allowing researchers to investigate other people’s experiences through a set of research methods such as interviews, group discussions, observations, and content analysis (Hennink, Hutter, & Bailey 2011, 8). In other words, this research method is an investigation of researchers to seek the answers to the questions, collect evidence, and produce evidence around the research topic (Mack, Woodsong, MacQueen, Guest, & Namey 2005, 1). There are three common qualitative research methods, which are participant observation, in-depth interviews and focus group. Each of those methods is suited for each type of data. Participant observation is used appropriately to collect data related to natural behaviors in their ordinary situation. An in-depth interview is a method to collect data from participants based on their own background, personal competence and experiences to the investigated topic. Finally, the focus group is used to collect data from a group of participants who share common cultural norm and general background. Regardless of different types of methods, they can be generated by noting, recording, videoing, and transcribing. (Mack et al. 2005, 2.)

One of the most common and important approaches to qualitative research methods is research interview (Qu & Dumay 2011, 238). According to Qu and Dumay (2011, 243), interviewing is an art of questioning and interpreting the answers. Interviews allow researchers to learn from others through their experience and perspectives regardless of different languages and diverse cultures. Although communication has become difficult as a consequence of different points of view, the data and information can be still enriched through a well-organized and carefully-planned interview. (ibid., 239.) It has been claimed that despite offering exclusive benefits, it is difficult to create a simplified and ideal interview situation according to the interviewees’ knowledge and experience and to determine whether the responses are true or not (ibid., 238). Interviews can be conducted in different settings such as individual or focus group. In individual interviews, participants are interviewed separately through questions which are prepared, structured and standardized. This type of interview is commonly used for sensitive topics or to collect personal worldviews. By contrast, focus group interview is practiced interviewing several participants together through discussions on less sensitive issues. Group interview is a convenient and time-saving method for
both interviewers and interviewees. Another significance of this method is that the answers will be less-biased. (ibid., 243.) Research interviews can be carried out in different themes such as face-to-face interviews, by phone or emails. Interviews are also classified based on its structure which includes structured, unstructured and semi-structured interviews. Structured interviews are conducted through a set of questions which are well-prepared same as questionnaires, but it can be more responsive as the interviewees are able to pose their questions to the interviewers as well. According to unstructured interviews, the number of topics is limited, and interviewers usually must encourage interviewees to focus on the issue discussed. The fact results in the preparation of questions according to what the interviewees mention. A semi-structured interview is the most popular type of interview due to its flexible adaptation. (Rowley 2012, 262.)

In this study, case study through a structured interview has been used to collect qualitative information. Qualitative case study is the most appropriate type of research methodology to describe and explain the investigated object. In comparison to quantitative research method, the qualitative method is more flexible since it is framed with question orders and fixed or ended answers but designed with open questions beginning with ‘what’, ‘how’, and ‘why’ (Mack et al.2005, 3). One of the advantages of using qualitative research method is to clear the issues of participants’ knowledge and perspectives and gain the understanding of the explanation and interpretation of the objects that are investigated. A qualitative method is an effective approach to investigate intangible objects which are not accountable such as cultural aspects, religions, ethnicity, and gender. (Mack et al. 2005, 2.) By using open questions, the qualitative method allows the interviewees to use their own words to interpret the objects instead of using the given answers, hence, the answers become richer, extended, and meaningful. (Mack et al. 2005, 3.) Likewise, interview method was selected to collect facts and gain an insight of opinions, attitudes, experiences, and behaviors towards natural makings as well as Arctic berry wax for cosmetics. As long as the individual interviewee is living in the Northern Finland and relatively busy for her new business, the interview was conducted via e-mails. Additionally, the topic has been defined to discuss and there are not sensitive or profound issues need to be solved. For those reasons, the structured interview was the most fitting option for this study. The structured interview was conducted strictly through a format of questions and their order has been pre-determined. Interview via emails is a flexible and time-saving method of research. It was not so challenging to interview the expert because she was highly responsive and willing to participate in the interview.
5.2  Implementation of the study

It is undeniable that the implementation of the study plays an important role in the research. It is suggested that the researchers should select and design carefully the questions, time and the participants (Rowley 2012, 261). Questions should be prepared to overcome the research questions, or they need to be adapted to the target interviewees (ibid., 263). Another important consideration is that the researchers should ensure that all participants understand the questions. It is also recommended to check the questions to ensure:
- they do not lead to any assumptions.
- there are no two questions in a sentence.
- they should not be yes/no questions.
- they are not too detailed or general.
- they must not be invasive.
(ibid., 265.)

The length and the number of interviews depend on the research questions and nature of the topic. The researchers should define their time resources and their capacity to implement effectively over longer interviews before conducting or estimate slightly longer time for unplanned events during the interviews. When identifying interview number, the interviewers must take account that individual interviewees have the different background, skills, and experience or any other factors affecting the answers to the questions. (ibid., 263-264.) Furthermore, potential interviewees are involved in the success of the interviews as they will provide findings for the research. The first consideration is their competence and experience in the fields covering the topic, therefore, they should be selected based on the research extent. The next consideration is how to access to those potential interviewees. It depends on different factors which comprise willingness and availability. To persuade them to co-operate in the interviews, the first motivation letter plays a key role. In the cover letter, the writer is suggested to:
- introduce yourself, instructor, course and the university you attend and explain the reasons you do the study.
- explain your research and the values interviewees can get from it to create motivation of the potential interviewees.
- present about the interview schedule and techniques such as face-to-face or e-mail interviews.
- be clear about the amount of time to take the interviews.
- ensure the confidentiality.
- invite them to ask for more information and indicate their availability.
- give them the contact information and follow-up if the first contact does not catch.

(ibid., 264-265.)

According to Rowley (2012, 266), the interviewers should introduce themselves, their research, and reasons why they have chosen this topic and why it is interesting to the interviewee at the beginning of the interview. Before asking questions, it is necessary to ask them to record the interview and ensure that surroundings make them confident to answer and if they do not wish to answer any question, they can absolutely do so. During the interview, the interviewers are the person who takes on the responsibility for managing it, accordingly, they should keep to time, encourage the interviewees to coordinate and motivate them. (ibid., 266.) After the interview, it is important to analyze the data and information the researchers have received. Firstly, the interviewer should listen to the recording to get full information. It is also recommended to transcribe the recordings even if they have made notes on important points. The transcripts should also be sent to the interviewees to check and approve it. (ibid., 267.) There are certain approaches to analyze the data but irrespective of methods, they will follow the basic process: organizing the data set, getting acquainted with the data, classifying, coding and interpreting the data (ibid., 268).

In the research, the thesis instructor, who also participates in Wax Project, has supported the researcher by providing a list of companies and experts' contacts. After searching and understanding these companies as well as experts' profiles from the Internet and their social network, some experts were selected to contact. It took quite long time to find the most proper interviewees when taking account of their backgrounds, experience, position and whether it is matched to the research topic. Besides, this was required to assure that the response rate is as high as possible. After the motivation letter (appendix 3) was written to invite them to elaborate, it was sent via emails to two companies, one blogger and one cosmetic organization which are Hilla company, Forest of Finland Oy, Formula Botanica blog, and CTPA, a British cosmetic organization. Nevertheless, there was only one positive answer in the following day from Sirkku Hahn, the co-founder of Hilla company, she was interested in the interview. Although CTPA replied to the request, they had received many requests from different researchers, but they had a limit of time, thus they had to prioritize researchers who are also members of their organization. It is unfortunate that CTPA could not co-operate in the research because they have the best knowledge of the UK cosmetic market and understand clearly how natural cosmetics is in this country. There were not any replies received from the rest of recipients. During the same week, the interview form (appendix
4) was sent to Sirkku by e-mail since we could not arrange a face-to-face meeting and then the respondent wrote her own answers in detail to every question. The questions in the interview form were divided into three e: cosmetic market, ingredients, and customers. In view of interviewing via emails, there was no need to record the interview as well as transcripts. The answers from the respondents were easily accessed as it was in form of text, so it did not require any facilities. As soon as the interview was done, and the answers were received, content analysis was used to analyze the data and information in empirical part. It is observed as a widely used qualitative research approach (Hsieh & Shannon 2005, 1277). The answers were examined question by question to understand thoroughly and compare them with the previous desk study research. Subsequently, the results were summarized and presented on the basis of question types and respondents.

5.3 Background of the case company

Sirkku Hahn is a co-founder of two companies, Hilla Naturkosmetik and INARI Arctic Cosmetics. Marketing is her professional background and she worked as a marketing manager in some international organizations. Notwithstanding, Sirkku is passionate about organic cosmetics and she even spent her last year to leverage her knowledge about organic and natural mixtures and brands. Founding two natural cosmetics companies in Germany and Finland, Sirkku has a solid knowledge and experiences in this industry in European countries. Hilla Naturkosmetik, which is an online retailer and wholesaler selling natural cosmetics, is based in Germany. Hille offers high-quality natural products which are rich in vitamins and contain a diversity of pure and ideal ingredients. These fundamentals help to relax the skin and stimulate the woman’s senses of their beauty and peculiarity. Currently, Hilla has been importing natural cosmetics from Scandinavia and the Baltic countries for about five years. However, the company will be closed at the end of 2017 as Sirkku wants to concentrate on her own new brand. INARI Arctic Cosmetics is going to launch in February 2018 and it is considered as a new eco-luxe skincare brand. The company uses 100 percent natural components in their skincares from Arctic plants harvested in the Lapland region in Finland. The key characteristic of INARI products is the complexity of many highly concentrated antioxidants extracted from those plants. There have been only two founders working in the company, Sirkku Hahn, and other co-founder, but they plan to start employing staffs after the launch.
5.4 Result of the interview

The following figure (see Table 5) indicates the achieved outcomes of the survey. The information was reported and interpreted as an extract from the interview of the case. During the interview procedure, all the keywords were highlighted in the transcript study to illustrate the behaviors, thoughts, and reaction of the participant. The findings were described and analyzed with the use of content analysis approach in the direction of emphasizing the crucial ideas and minimizing the unnecessary data. On the basis of the script relations, the answers were identified and classified into three main themes including market research, natural ingredients, and customers' attitudes.

TABLE 5. Content analysis of the interview

<table>
<thead>
<tr>
<th>Text</th>
<th>Content analysis</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>“It is globally growing 4-5% p.a. In Germany the market has doubled its size in the last 10 years.”</td>
<td>Cosmetics sector has been increasing continuously all over the world around 5 percent annually. It is proved by the case in Germany there the market share has expanded double over the last ten years.</td>
<td>Market research</td>
</tr>
<tr>
<td>“Innovative and multi-functional products. Interesting niche brands with unique story, vegan products, new ingredient mix, mild ingredients which can be used for sensitive skin.”</td>
<td>The trend of natural cosmetics nowadays is the emerged modernized offerings with diverse functions in one package, totally natural products, new mixture for sensitive skin, particularly the storytelling of brands.</td>
<td>Market research</td>
</tr>
<tr>
<td>“The opportunity lies in the huge market potential. The German market is the European leader and the market share is 8.5%. In average markets it is about 4% so it can be expected that e.g. in the Nordic countries the markets will be doubled.”</td>
<td>The great market share of natural cosmetics and its dramatic growth open the opportunity door for new players. For instance, the sector accounts for 8.5 percent and 4 percent in the sum value respectively in Germany and Europe. Nordic countries are estimated to experience a double increase in the size.</td>
<td>Market research</td>
</tr>
</tbody>
</table>
"The challenge is that big global concerns will enter the market and launch products with only some natural ingredients claiming it natural cosmetics. This will be a challenge for smaller, authentic companies with limited marketing possibilities."

The major drawback is the rising number of brands striving to access the market. Their products may be composed of little natural extracts but still be seen as natural cosmetics. The issue triggers threat to small and medium players that have a limited budget for promotion.

"Very high competition, it is mainly possible to enter the markets with an innovative concept. In the low-price sector is the hardest competition."

Despite tough competition, there are still opportunities to compete with key players in case of offering remarkable products with innovative ideas.

"It is the future! There is currently a lot of “green washing” but as consumers get more informed and sophisticated they will not accept this anymore."

Natural and organic cosmetics are on the trend in the future. Due to the emergence of misleading customers, they become more careful when buying natural section.

"We use arctic ingredients like chaga, bilberry, cloudberry and pine. Our ingredients are from Finland and EU-countries"

Products of the case company are produced from wild berries in the Lapland area. They are committed to 100 percent natural.

"Sustainability, ingredients are effective and good also on the long term for skin, they help skin to help itself to become stronger, emotional benefits. It is suitable for vegans, which is not a trend but a staying way of living from my mind."

In comparison with other types, the natural are not only friendly to the environment but also bring impressive benefits to the skin texture. Especially, it is a good option for vegan users who seek completely natural products.

"So far I know there are already some berry wax and carnauba wax used. Lip care, lip sticks, skin care, hair products, hand- and footcare."

There are some popular natural waxes applied in cosmetics such as berry wax and Carnauba wax. The waxes have been used in lipsticks, lip balm, skin care, hair treatment, hand and foot cares.
<table>
<thead>
<tr>
<th align="center">&quot;There is market for all kind of ingredients also for more expensive as high-priced cosmetics products are growing (like INARI).&quot;</th>
<th align="right">Regardless of the price, there are always markets and customers for all makings, including natural waxes. This can be illustrated in the case of INARI, which offered high priced skin cares.</th>
</tr>
</thead>
<tbody>
<tr>
<td align="center">&quot;I know all the Finnish brands like Lumene, Detria etc, are using Arctic berries such as lingonberry and bilberry in cosmetics. Purity, effectiveness, they contain so many vitamins.&quot;</td>
<td align="right">The wild berries have been popularly used in many products of reputation brands such as Lumene and Detria. In addition to the high volume of vitamins, the berries are purer and more effective than many plants.</td>
</tr>
<tr>
<td align="center">&quot;Expected benefits, the brand story, the design, skin feel and smell, price relation.&quot;</td>
<td align="right">The criteria that consumers consider include benefits, the package, the skin effects, smell, price and the brand story.</td>
</tr>
<tr>
<td align="center">&quot;They should be effective, bring fast effects, nice in usage, smell good, the brand should be convincing.&quot;</td>
<td align="right">The users prefer products which not only bring quick feasible change to the skin but also a conforming smell.</td>
</tr>
<tr>
<td align="center">&quot;They want to get excited about new brands, products and stories, consider many products &amp; brands being boring.&quot;</td>
<td align="right">The unsatisfied needs are concerned with the brands and their stories. Being bored with existing products, customers are likely to be more interested in new brands.</td>
</tr>
<tr>
<td align="center">&quot;Many customers buy natural cosmetics as they like the products, they do not check all ingredients e.g. if wax is used. For vegans it is important that no beeswax is used.&quot;</td>
<td align="right">The customers tend not consider whether natural wax is used in a product. Yet, it is important for vegans who want to ensure there is no animal wax in the elements.</td>
</tr>
</tbody>
</table>

**Natural ingredients**

**Customer attitudes**
6 RESULTS OF THE STUDY

The SWOT framework (see Table 6) represents the high and low values of the wild berry wax serves as a natural additive in cosmetics as well as the favorable and adverse business environment in the case market. The model has been built relied on the property examination of the wax as demonstrated in chapter 3 and the market research analyzed in chapter 4. Both the specific geographical area and extreme surviving conditions contribute to the creation of the berries’ uniqueness (see chapter 3.3.1). Accordingly, the composition is constituted by a great number of vitamins, flavonoids, and phenolic compounds, which affect the skin texture and gloss surface. Yet, some limited aspects concerning the small availability, excessive cost, and damages within the progress of distribution have been found in the berry wax (see chapter 3.3.2). In terms of the business conditions, the UK is a potential destination for cosmetics companies through offering a stable environment, various developed technology, and the trend of customers towards natural products (see chapter 4.2 & 4.3). In conjunction with those advantages, to access the market companies are required to overcome some obstacles derived from the complex safety regulations and importantly the competitiveness of the industry (see chapter 4.3 & 4.4).

TABLE 6. SWOT Analysis for Arctic Berry Wax in the UK

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Applicable in different natural cosmetic products</td>
<td>- Adhesion and persistent of make-up</td>
</tr>
<tr>
<td>- A range of nutrients</td>
<td>- Heavy texture</td>
</tr>
<tr>
<td>- High content of Vitamin C and phenolic compounds</td>
<td>- Relatively costly</td>
</tr>
<tr>
<td>- Totally vegan and natural</td>
<td>- Small players and volume</td>
</tr>
<tr>
<td>- Less contaminated</td>
<td>- Stored in limited time (6 months)</td>
</tr>
<tr>
<td>- High-quality</td>
<td>- Challenges of distribution</td>
</tr>
<tr>
<td>- Friendly to environment</td>
<td></td>
</tr>
<tr>
<td>Opportunities</td>
<td>Threats</td>
</tr>
<tr>
<td>--------------------------------------------------</td>
<td>----------------------------------------------</td>
</tr>
<tr>
<td>- Quite stable politics</td>
<td>- High competition</td>
</tr>
<tr>
<td>- Customers' trend towards natural cosmetics</td>
<td>- Complicated rules and regulations</td>
</tr>
<tr>
<td>- Increase of online shopping and e-commerce</td>
<td>- Ban of animal testing</td>
</tr>
<tr>
<td>- Development of advanced technology</td>
<td>- Outcomes of Brexit</td>
</tr>
<tr>
<td>- More options of suppliers</td>
<td>- Negative outlook of economy</td>
</tr>
<tr>
<td></td>
<td>- High bargaining power of buyers</td>
</tr>
</tbody>
</table>

The value proposition of the berry wax is formed based on two main sectors including the target customer segment (see figure 12) and its value proposition (see figure 13). Three factors including jobs, pains, and gains affecting the purchasing decision of the segment form the framework. According to the investigated data (see chapter 4.1), over 45-aged women are the major customers purchasing cosmetics and preferring natural category and willing to spend more money on premium segments. It is believed that the group should be the target segment for Arctic berry wax-based products. The group tend to select anti-aging cosmetics types in their basket and customers desire to make up to look self-confident and charming if going out (see chapter 4.1 & 4.3). Meanwhile, the berry wax has various applications in many beauty products to help those consumers get their jobs done. The most likely causes of disturbance are the adverse consequences the ingredients trigger to the skin, therefore, consumers expect mild elements in their products (see chapter 4.2 & 5.4). Another concern influencing on the customers' purchasing decision is environmental pollution, for not only the surroundings preservation but also their skin protection from the air contamination (see chapter 4.3). These pains can be eliminated by the pureness and eco-friendliness of the wax. Despite not exposing any serious irritation, the smell of cosmetics products is taken into consideration as customers' preference are the odorless (see chapter 4.2). The texture of arctic berry wax-based products is expected to be quite heavy and greasy owing to the certain composition of the component, resulting in annoyance to the users. Unfortunately, there has been no relievers for these disturbances currently. It is a widely held view that the wax brings a variety of preferable properties to the skin, but the price is still higher than other existing natural waxes on the market. (see chapter 3.3.2.) The evidence from this study suggest that offering certificated ingredients in cosmetics can create gains to the customers who desire the safety of products (see chapter 4.2). The purity and less contamination help the berry wax-based products gain easily the certification (see chapter 3.3.1).
FIGURE 12. Customer Segment of Arctic berry wax-based products

FIGURE 13. Value Proposition of Arctic berry wax-based products
7 CONCLUSIONS

The aim of the study was to examine the business potential of Arctic berry wax for natural cosmetics in the United Kingdom. To tackle the research question, the study attempted to explore the overall importance of natural wax and Arctic berry wax in the cosmetic industry to conclude the strengths and weaknesses of the ingredient. Furthermore, the natural cosmetic trend in the UK and the market competition was also investigated with the help of analysis models in order to assess the opportunities and challenges of cosmetic market in the UK. Based on those studies, SWOT and value proposition frameworks for Arctic berry wax were built eventually as references for Wax Project.

The present study makes several noteworthy contributions to the research of value proposition of the berry wax. The findings not only provide a framework for the exploration of advantages and disadvantages of the wax could also be used to help cosmetics companies build their marketing strategy towards the UK market. The value propositions have indicated the target customer group suggested the gain creators and pain relievers that the company should focus on to grab attention and establish the loyalty of consumers. These findings have significant implications for the understanding of what the berry wax offers to cosmetics and how the market is in the UK, hence this research will serve as a base for future studies of Arctic berry wax.

The theoretical background for the research is marketing theories comprising market analysis methods which were used in different economic applications to investigate the cosmetic industry in the country. There is a diverse range of analysis approaches, but a few of them were optioned such as PEST, Porter’s five forces, SWOT and Value Proposition Canvas. Due to their popularity in academics and usefulness in business analysis, those tools were mentioned and described briefly. Particularly, Value Proposition Canvas was defined clearly to gain an understanding of this framework application. The concepts and different categories of natural waxes were explained clearly so that readers can have an insight into waxes that are quite new for business students.

Natural wax has been applied to usual cosmetic products since it possesses definite distinguishing qualities that are beneficial to the skin by rejuvenating, moisturizing and protecting. Owing to the growth in wild rural areas in Nordic countries, Arctic berries contain a high content of vitamins and nutrients, particularly to be purer and less contaminated. Strengths and weaknesses of Arctic berry wax for cosmetics were also examined and compared to others to some extents. The evidence
from this study highlights the content of high-quality compounds, versatility, purity, and friendliness to the surroundings of the wax. Taken together, the wax is also limited by the heavy texture, lack of availability, short life span, and costliness.

The market analysis chapter in the research provides a general picture of natural cosmetics sector in the United Kingdom. It is observable that there has been a dramatic growth in not only cosmetics industry but also the natural and organic sector in this country. With the help of PEST analysis, it can be recognized that for sustainable development, many regulations and laws relevant to natural components become a great barrier to enter the market. Notably, the Brexit event exerts a negative influence on the economics in general, including cosmetics sector. However, the positive outlook of customers’ trend and advanced innovation motivates the market to rise far in the future. With regard to the competition, it is irrefutable that there have been many reputable brands emphasizing natural and organic cosmetics on the market, but for Arctic berries the figure is notably small. By using Porter's five forces model, it has been figured out that bargaining power of supplier is relatively low, but for certified and quality ingredient, suppliers have some certain power. By contrast, the threat of new entrant, substitutes and bargaining power of buyers are outstandingly high in the cosmetic industry. Although natural cosmetic market experiences a high competition, the wax is an incomparably accomplishable element in this market thanks to its origin and properties.

The empirical part of this study was conducted by doing qualitative case study and provides a new understanding of the berry wax under the perspectives of a cosmetics expert. It is one of the most convenient methods used to collect the values, attitudes, and behaviors of experts who have competences and experiences with natural cosmetics. Email interview was used to conduct the research in view of convenience for participants. A form of the interview, in which questions and their orders had been determined, was sent to the interviewee. In this form, the questions are concerned with the cosmetic market, natural compounds and customers. The participant has accumulated many years of experiences in natural cosmetics industry. A set of data and information about natural cosmetic was gathered and analyzed to examine the business potential of new natural materials for cosmetics. Although the current study is based on only one interview, the findings of the interview suggest that the new berry wax is a treasured ingredient for the skin.

In conclusion, the research has investigated the natural cosmetic industry in the United Kingdom, the strengths and weaknesses of the berry wax as a cosmetic additive. Despite some drawbacks
of the market, the opportunities have still outweighed challenges and the UK is a promising market for natural cosmetics.
8 DISCUSSION

8.1 Limitations of the study

To summarize, the thesis has overcome the research question, yet the study still has several limitations. These drawbacks lie in the analysis of the investigated wax, limited up-to-date data and information and the number of interviews conducted.

There is no doubt that the analysis of Arctic berry wax plays a key role in researching its business potential for cosmetics, whereby the section makes several noteworthy contributions to the research. However, during the process of studying the ingredient, the researcher faced with some main difficulties. Firstly, the data about Arctic berry wax is so restricted that it most likely could not be found any published information. Consequently, it was rather difficult to perceive which characteristics are its strengths and weaknesses compared to other types of natural waxes. Another problem lies in the applications Arctic berry wax in cosmetic products. It is true that there are a few literatures around natural wax in cosmetics; but there has been little published literature and laboratory results mentioning the wax usage in cosmetic products. Hence, it is necessary to contact with somebody who has researched about it to get some information.

The second weakness of the study is the limitation of up-to-date data and information. Despite the abundance of information about natural cosmetics in the UK, there is a shortage of up-to-date data that will provide a clearer and exact outlook of cosmetic industry in this country. There are some reliable reports and literature concerning natural cosmetics in the UK, but they are unfortunately required to be paid to access. This causes the use of some out-of-date literature reviews and available websites of some blogs and organizations.

With regard to the empirical part, it is regrettable to not conduct different interviews with experts who have different backgrounds, particularly with someone who has the best knowledge of the UK market. If the empirical plan had gone well, the research would have yielded information from CTPA, a cosmetic organization in the UK. Basing domestically, the organization has almost reliable data about natural cosmetics in the country. Besides, it would have been great if there were interviews with different companies which specialize in supplying or manufacturing natural
compounds. These experts would provide the research more information about the outlook for supply chain and production of Arctic berry wax as well as natural wax in the cosmetic industry. Based on interviews, SWOT and Value Proposition Canvas frameworks could be extended broadly. The lack of interviews with experts who have experiences and knowledge in these fields is a shortcoming of the study.

8.2 Validity and reliability

One of the major concerns about the findings is certainly the validity and reliability of evidences, which illustrates the extent of trustworthiness of the data reported. In case study research method, four tests should be operated to measure the quality of evidence: construct validity, internal validity, external validity and reliability. Construct validity requires the accurate establishment of evaluation for the investigated object by limiting bias manners and connecting the questions of data collection with research questions and propositions. It can be assured by using a variety of evidence, building a data chain, and reviewing the draft by a chief informant. Internal validity, which establishes certain settings resulting in other conditions, is evaluated for explanatory and causal studies and cannot be applied in descriptive add exploratory research. Techniques for this test consist of analysis of within-case and cross-case, representation of data to build explanation, and time series analysis. External validity emphasizes the necessity of replicating the experiments to generalize the results concerned with the literature reviews. Tactics can be used to increase the external validity are replicating multiple case investigation to highlight the main result, and using case study protocol. Reliability is demonstrated through the procedural process of the case requiring the information properly documented or restored in the database by developing case study database. (Rowley 2002, 20-21.)

With the objective of ensuring the validity, triangulation technique was used in the procedure of data collection. In the present research, data and evidence were collected from multiple resources such as books, journals, practical data, and interview to avoid the subjectivity of the investigator. The information of natural wax and Arctic berry wax is not only gained from the previous studies but also via e-mail message with a Master of Science, who has studied about the wax and found out exceptionally impressive nature in cosmetics applications. These data were analyzing by highlighting the keywords concerned with the components contained, effects and lifespan of the berry wax, leading the repeatability of results of studying this ingredient. Likewise, based on many
previous published reports and statistics, the evidence of the UK market was generated to explore the trend of natural cosmetics. All the sources of data are provided with appropriate citation and access arrangement. In addition to those sources, an e-mail interview with an expert in the industry was conducted for the sake of assuring the validity. A structured questionnaire including formulated questions was built based on the research questions that were not posed to the respondent to prevent the biased opinions. The provided information and attitudes were analyzed through the transcription and interview notes, particularly the content was propositioned in accordant with the questions and fields the evidence covers. As a consequence, a chain of evidence was maintained, and case study database was gathered through well-organized tables comprising interview transcripts, notes, and analysis. Results of the interview strengthens the conclusion of the market analysis and natural ingredient section, establishing the consistence of the research.

8.3 Recommendations to Wax Project' partners

The research plays a crucial part in Wax Project and firms which are planning to offer Arctic berry wax-based cosmetic products to the market in the United Kingdom. Particularly, companies that consider developing their commodities from the wax will gain an insight into the commercial potentials of this wax. With the purpose of planning better business strategies, the suggestions for natural cosmetic manufacturers, suppliers, and cosmetics companies are drawn based on the analysis results from the current study.

For natural cosmetics manufacturers and suppliers which seek business partners in the UK, rules, and regulations regarding prohibitions and testing should be taken carefully into considerations. The reason lies in strict laws and safety regulation in this country with the prohibition of hundreds of cosmetics additives and animal testing. Another consideration for natural cosmetic companies is that because British consumers pay more attention to high quality and certificated raw materials, it is highly important to source materials from reliable vendors. This can be achieved by collaborating and building a good relationship with those suppliers play critical roles in business operation and creating competitive advantages. Owing to the fact that the competition of natural cosmetics is excessively tough in the country, it is a necessity to offer a superior product with added-value essences to stand out from recognizable competitors. For Arctic berry wax, it should be stored in a suitably good condition by virtue of its short lifespan and damage within distribution process.
Beauty sellers should target women who are over 45 years old as this group of customers prefers organic and natural cosmetics rather than chemical goods. They are also willing to spend much money on a high-quality segment in exchange for skin satisfaction and expectation. Additionally, the majority of the customers in the group are looking for a product with anti-aging and firming functions that can be easily found as one of the main privileges of organic and natural cosmetic combinations. For the awareness of sustainable development, British consumers' preferences are usually put on companies and manufacturers not only offering superb products but also emphasizing on environmental-friendly factor and ethical issues. Due to high threat of new entrants, it is also important to build loyalty amongst consumers, particularly the key group of customers.

8.4 Future research

The berry wax and market analysis in the current study can be seen as references and directions to conduct further researches regarding many marketing aspects. These suggested studies can be broadened to include product development of the berry wax, customer behavior, and marketing strategies for natural cosmetics in the UK.

The initial clarification of the berry wax in cosmetics supports the expansion in research and development of cosmetics products produced from the berry waxes. A further study could determine different cosmetics applications of the wax in new categories and assess the long-term effects of the waxes to the complex skin structure. By examining the ingredient, more experimental research needs to be done to explore the entire value chain from supplying to create a valuable product which has enough comparable to enter the cosmetics market.

Another possible area of future research would be to examine the customer behavior towards an advanced natural cosmetic component. The current findings enhance our understanding of customer changes in their purchasing habits and indicated the target customer segment should be for the natural sector. Future research should, therefore, concentrate on the investigation of behaviors and attitudes to clarify the needs, expectations, and dissatisfaction the segment. More data on the group would help to assure a greater level of accuracy on the value proposition framework.
A natural progression of this work is to establish a marketing strategy on the British market based on the multiple analysis of the business environment. The present research describes the macro environment factors exerting a great effect on doing business in the country. This could be a part of market research procedure and a base for marketers to understand the market growth, potential, position and strategic management, thus building a comprehensive marketing plan for better operations.
REFERENCES


### UK QUICK TAX FACTS

**APPENDIX 1**

**TABLE 7. UK quick tax facts for companies (Deloitte 2015, 9-10)**

<table>
<thead>
<tr>
<th>Taxation type</th>
<th>Tax Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corporate income tax rate</td>
<td>20%</td>
</tr>
<tr>
<td>Branch tax rate</td>
<td>20%</td>
</tr>
<tr>
<td>Capital gains tax rate</td>
<td>0-20%</td>
</tr>
<tr>
<td>Basis</td>
<td>Worldwide, subject to election for branch exemption</td>
</tr>
<tr>
<td>Participation exemption</td>
<td>Yes</td>
</tr>
<tr>
<td>Loss relief</td>
<td></td>
</tr>
<tr>
<td>- Carryforward</td>
<td>Indefinite</td>
</tr>
<tr>
<td>- Carryback</td>
<td>One year</td>
</tr>
<tr>
<td>Double taxation relief</td>
<td>Yes</td>
</tr>
<tr>
<td>Tax consolidation</td>
<td>No, but loss relief is available, and assets can be transferred intragroup without crystallizing a gain or loss</td>
</tr>
<tr>
<td>Transfer pricing rules</td>
<td>Yes</td>
</tr>
<tr>
<td>Thin capitalization/interest restriction rules</td>
<td>Yes</td>
</tr>
<tr>
<td>Controlled foreign company rules</td>
<td>Yes</td>
</tr>
<tr>
<td>Tax year</td>
<td>Shorter of 12 months or period for which accounts are prepared</td>
</tr>
<tr>
<td>Advance payment of tax</td>
<td>Yes</td>
</tr>
<tr>
<td>Return due date</td>
<td>12 months from end of accounting period</td>
</tr>
<tr>
<td>Withholding tax</td>
<td></td>
</tr>
<tr>
<td>- Dividends</td>
<td>0%</td>
</tr>
<tr>
<td>- Interest</td>
<td>0-20%</td>
</tr>
<tr>
<td>- Royalties</td>
<td>0-20%</td>
</tr>
<tr>
<td>- Branch remittance tax</td>
<td>0%</td>
</tr>
<tr>
<td>Capital tax</td>
<td>No</td>
</tr>
<tr>
<td>Stamp duty</td>
<td>0.5%</td>
</tr>
<tr>
<td>Stamp duty reserve tax</td>
<td>0.5%</td>
</tr>
<tr>
<td>Stamp duty land tax</td>
<td>Up to 15%</td>
</tr>
<tr>
<td>Tax</td>
<td>Rate</td>
</tr>
<tr>
<td>---------------------------</td>
<td>-----------------------</td>
</tr>
<tr>
<td>Land and buildings transaction tax in Scotland</td>
<td>Up to 20%</td>
</tr>
<tr>
<td>Real estate tax</td>
<td>Varies</td>
</tr>
<tr>
<td>Payroll tax</td>
<td>No</td>
</tr>
<tr>
<td>Social security contributions</td>
<td>13.8%</td>
</tr>
<tr>
<td>VAT</td>
<td></td>
</tr>
<tr>
<td>- Standard rate</td>
<td>20%</td>
</tr>
<tr>
<td>- Reduced rates</td>
<td>0-5%</td>
</tr>
</tbody>
</table>
**Figure 14. UK Unemployment Rate** (Statista 2017, cited 28.9.2017)

**Figure 15. UK GDP Growth Rate** (Statista 2017, cited 28.9.2017)
FIGURE 16. UK Interest Rate (Statista 2017, cited 2.11.2017)
Good morning,

I would like you to participate in an interview study as an expert in the field of natural cosmetics. I hope you will be involved in this interview because you specialize in this field and have the best knowledge about the topic being studied. With this project, you can get some ideas for your own product development as well as opportunities to participate in this multi-disciplinary project.

The wax project is co-operated by Nordic universities with the aim of developing environmentally-friendly methods of extracting bilberry and lingonberry wax from the wild berry industry side streams and waste. This development could be applicable to creating innovative high-quality berry wax through the value chain of berry waxes. The project partners include Center for Microscopy and Nanotechnology at the University of Oulu, the Department of Plant Biology and Biotechnology at the University of Oulu, the Oulu University of Applied Sciences, the Luleå University of Technology, the Arctic and Marine Biology Department of the University of Tromsssa.

In the project, as a student of the Oulu University of Applied Science, I am doing a bachelor’s thesis on the topic: Potentials of Arctic Berry Wax for Cosmetics in the UK. The aim of the thesis is to find out what kind of business opportunities there are for Arctic berry wax in the natural cosmetics industry in the UK and then building a value proposition framework for the project’s partners. My thesis instructor is Helena Ahola, Principal Lecturer of the University of Applied Sciences.

Some companies and bloggers have been selected for interviews and these individual interviews are collected as research material. Because of quite long distance, the interview is conducted through e-mail via some questions and thus the time is flexible for every interviewee and of course, it will not take a very long time to answer those questions. If you have any questions, we will be happy to provide you with more information about the project and research.

Thank you for your co-operation,
Phuong Cao.
STRUCTURED INTERVIEW FORM

APPENDIX 4

Background
- Business background (product, target customer)
- Size (staff, revenue)

Cosmetics market
- What does the cosmetics sector look like?
- How is the trend of natural cosmetics nowadays?
- What are the opportunities and challenges for natural cosmetics?
- How is the competition in natural cosmetics industry?
- What do you think about natural and organic cosmetics?

Cosmetic Ingredients
- What are the natural ingredients in your company’s products?
- What are strengths of natural ingredients compared to other ingredients?
- Where are natural ingredients in your products are from?
- Is there any natural wax used for cosmetics on the market? What kinds?
- What kinds of strengths do you expect from natural waxes?
- What kinds of cosmetics products can be made from natural waxes? (eg. skincare, make-up, lipstick, …)
- Have you heard about Arctic berries such as lingonberry and bilberry in cosmetics? If yes, which products?
- What are benefits of Arctic berries compared to other natural ingredients?
- What do you think about the price of natural ingredients and waxes? (expensive, affordable)
- Are you interested in new wax such as Arctic berry wax in your products?

Customers
- Which benefits of cosmetics products are your customers expecting?
- What are the main buying criteria for products for your customers?
- Which characteristics of natural ingredients bother your consumers?
- What kinds of some unsatisfied needs are there among customers?
- What makes consumers buy natural wax cosmetics?