Collaboration between Finnish restaurants and organic food producers

Ekaterina Shalkovskaya

Bachelor's Thesis
Degree Programme in Hotel, Restaurant and Tourism Management
2015
Organic food is a step towards environmental sustainability. The demand for organic food is constantly growing and the size of organic farmland is increasing in Finland. Nevertheless, the share of organic products in the Horeca sector is relatively small. The growth has been restricted by different reasons, some of which are insufficient distribution channels, long logistics distances and difficulties for restaurants and farmers to find each other.

This thesis is a part of a bigger project that aimed at creating a business-to-business web-service for Finnish organic producers and restaurants to find, communicate and do business with each other. The aim of the thesis is to study the cooperation between Finnish restaurants and Finnish organic producers. Three research questions are asked: “What are the trends and attitudes towards organic food in Finland?”, “How do the restaurants and farmers establish and maintain partnerships? How do they find and collaborate with each other?” and “Is there a need for the web-service? Will the respondents be interested in joining the platform?”

In the thesis the notion of organic food and the benefits of organic agriculture are studied. The development of the Finnish organic farmland, the use of organics in the Horeca sector and the attitude towards organics in Finland are analysed. The quantitative approach to data collection is used and a questionnaire is chosen to be a research method. Two questionnaires were implemented during December – January 2015.

Theoretical part and survey results prove that organic food is a trend but high pricing is the main obstacle keeping restaurants from using organics more. There is no certification system for organics in the Horeca sector, this creates lack of transparency for those restaurants that use organic food.

The survey findings showed that the need for the online platform exists. 9 out of 13 producers and 8 out of 22 restaurant showed interest in the web-service and would participate as test users in the prototype of the platform. The biggest reasons for joining the web-service are to find new partners and new customers. The other reasons are to market their products and to simplify the ordering process that usually happens over phone or email. In accordance with that, the project team decided to continue with the business idea.

**Keywords**
Organic food, producers of organic food, Finnish restaurants, web-service
1 Introduction

“The primary goal of organic food production is to optimize the health and productivity of interdependent communities of soil or aquatic life, plans, animals and people” (Codex Alimentarius Commission 2013, 42).

Organic food production is one of the steps towards environmental sustainability, which is defined as “a way of living, working and being that enable all people of the world to lead healthy, fulfilling, and economically secure lives without destroying the environment and without endangering the future welfare of people and the planet” (Johnson, Everard, Santillo & Robert 2007, 62).

More and more people want their food to be organic. Some people find organic products tastier and healthier than those coming from conventional farms while others like them due to the environmental reasons or because of the labour force employed on organic farms (European Commission 2013, 5).

1.1 Objectives

The thesis is a part of a development project organized by three Haaga-Helia students. The aim of the project is to create a business-to-business web-service that would connect Finnish producers of organic food and Finnish restaurants. It would also function as a platform for both parties to find, communicate and do business with each other. The members of the project would like to promote sustainability and healthy lifestyle with the help of the web-service.

This business idea was created when the author tried to find more information about Finnish farmers and she realized that there is not much available. Sandro von Brandenburg and Tommi Järvinen, students of Business IT Degree Programme, liked the idea to combine skills and create a new service that would change the old way of doing business between Finnish restaurants and producers.

The aim of the thesis is to study the cooperation between Finnish restaurants and Finnish organic producers. In order to achieve this aim, the author explains the notion of organic food, the benefits of organic agriculture and the attitude towards organics. The author designs two questionnaires for organic food producers and restaurants and analyses the respondents view on organics, the way they establish partnerships and market their
organic production. She also studies the respondents’ current order process. In the end the author comes to conclusion, whether to create the web-service.

There are three main research questions in the thesis:
RQ1: What are the trends and attitudes towards organic food in Finland?
RQ2: How do the restaurants and farmers establish and maintain partnerships? How do they find and collaborate with each other?
RQ3: Is there a need for the web-service? Will the respondents be interested in joining the platform?
The answers to the questions will help the project team to decide whether to continue with the business idea.

At the same time, two other team members are working on functionality of the web-service and its technical performance. Sandro von Brandenburg is writing a thesis called “Modernizing the supply chain: focus on the organic food order process” and Tommi Järvinen is working on “Technical implementation and deployment of a web application connecting restaurants and organics producers”. The result of all three theses would be designing new online platform. It would be available for restaurants and producers, and later for the consumer.

1.2 Scope and structure

The thesis is a research type of thesis, where a quantitative approach is chosen to be a method to collect data. The author created email questionnaire to get more information on the topic. The thesis starts with the theoretical framework where a closer look at organic food and organic production is taken and benefits of organic food are explained. The author studies the development of the Finnish organic farmland and organic agriculture, the use of organics in Horeca (Hotel, Restaurant and Catering) sector and the attitude of the Finnish people towards organics.

In the second part of the thesis, two questionnaires are developed and the results are explained. The results analysis is quite extensive because the author creates two surveys instead of one and wants to compare the answers of producers and restaurants. In the end, the findings of questionnaires are discussed. The author explains the meaning of the surveys’ results for the project. The decision whether to continue with the company is made. Questionnaires in English and Finnish can be found as attachments.
The reader should keep in mind that this research is conducted in order to decide whether there is a need for the web-service. Two theses of the other team members are focused on the development of the web-service. The result of all three theses would be creating a Beta version of the platform. Beta software is a software that is under the testing mode and hasn’t been officially released. It is done in order to get enough feedback before releasing the final version. (TechTerms 2015.) It is crucial for the project team to find prototype users for the Beta, therefore the whole research of the current work is developed around that.

Due to the limited scope of the bachelor thesis, many aspects of the research were omitted. For instance, for the project team it would be necessary to study the consumer, retail shops and competitors in regard to organic food.
2 Organic agriculture

Organic agriculture is a production system that sustains the health of soils, ecosystems and people. It relies on ecological processes, biodiversity and cycles adapted to local conditions, rather than the use of inputs with adverse effects. Organic agriculture combines tradition, innovation and science to benefit the shared environment and promote fair relationships and a good quality of life for all involved. (International Federation of Organic Agriculture Movements 2008b.)

As defined by the Codex Alimentarius Commission (2013, 43), organic production is a “holistic production management system that promotes and enhances agro and aquatic ecosystem health, including biodiversity, biological cycles and soil or water biological activity”. “This is accomplished by using, where possible, cultural, biological and mechanical methods, as opposed to using synthetic substances, to fulfill any specific function within the system.”

Organic foods are “foods that are grown without the use of toxic and persistent pesticides, synthetic fertilizers, and growth hormones”. They are produced according to production standards that prohibit the use of genetically modified organisms, radiation, and sewage sludge. Organic livestock standards require living conditions appropriate to the species, including access to the outdoors and conditions that allow for the natural behavior needs of animals, and prevent the routine use of antibiotics and growth promoters. (Baldwin 2009, 162.)

The main points of organic agriculture are that artificial chemical fertilisers are banned, pesticides are severely restricted and diversity of crops and animals are rotated around the farm over several seasons. This kind of approach helps to get rid of pests and disease and it builds fertility in the soil. Animal welfare is an important part of organic farming and a free-range life for farm animals should be provided. The routine use of drugs, antibiotics and wormers is prohibited, as well as genetically modified crops and ingredients. (Soil association 2013b.)

Currently there are 37,5 million hectares under organic agricultural management worldwide. The region with the most organic farmland is Oceania, with 12,2 million hectares, followed by Europe with 11,2 million hectares, Latin America (6,8 million hectares), Asia (3,2 million hectares), North America (three million hectares), and Africa (1,1 million hectares). (Research Institute of Organic Agriculture & International Federation of Organic Agriculture Movements 2014, 37.)
2.1 Environmental benefits of organic agriculture

Organic agriculture has various objectives, such as to protect environment, to maintain and enhance ecosystem, to encourage biodiversity, to provide animals with good living conditions and to produce good food. “It also provides a key to solving the problem of climate change: organic farming is an alternative that uses resources sparingly, is climate-friendly, and offers significant scope for climate change adaptation.” (Research Institute of Organic Agriculture 2014.) In this chapter, the benefits of organic soil and the effects of organic agriculture on air and climate change are explained.

2.1.1 Soil

“Most of the plant's nourishment comes from the soil” (Soil association 2013a). Soil has four components: minerals, water, air and organic material. These are living and nonliving components. The nonliving components come from “the dead plant, animal, and microbial matter while the living organic material is from flora and fauna of the soil biota, including living roots and microbes.” (State of the world 2009, 34.) The organic components provide nutrients and minerals that are crucial for the plants and the soil fauna. They are also reservoirs of carbon in the soil. (State of the world 2009, 35.)

“Organic agricultural practices are designed to work with and emulate living ecological systems and disturb the natural balance as little as possible” (International Federation of Organic Agriculture Movements 2008a, 17). There are different ways of how to improve soil formation and to create more stable systems. For instance, crop rotations, intercropping, symbiotic associations, cover crops, organic fertilizers and minimum tillage, all of these practices are the core of organic agriculture (the definitions explained below). These help in soil erosion control and soil biodiversity. These management techniques also “increase nutrient and energy cycling and enhance the retentive abilities of the soil for nutrients and water, compensating for the non-use of mineral fertilizers.” (Food and Agriculture Organization of the United Nations 2015, 6.)

Another important factor is that organic agriculture helps to increase water retention capacity and it creates more stable and fertile soils. It means that organic farming is less vulnerable to extreme weather conditions such as droughts, floods and water logging. Therefore, organic agriculture helps to reduce vast amounts of risks. (Research Institute of Organic Agriculture 2014.)
Synthetic fertilizers and pesticides from the soil in conventional farming cause pollution of groundwater courses. Since these are banned in organic agriculture and replaced by organic fertilizers, the risk of groundwater pollution is greatly reduced. (Food and Agriculture Organization of the United Nations 2015, 6.)

To understand better the notion of organic soil, the definitions of crop rotation, intercropping, cover crops and minimum tillage are given. “Crop rotation is the successive cultivation of different crops in a specified order on the same fields” (Encyclopedia Britannica 2014). Inter-cropping is the cultivation of two or more crops simultaneously on the same field to avoid the same insect pests and disease-causing pathogens and to conserve the soil (OISAT 2010). “Cover crops are plants seeded into agricultural fields, either within or outside of the regular growing season, with the primary purpose of improving or maintaining ecosystem quality” (Midwest Cover Crops Council). Minimum tillage means technique of drilling seed into the soil with little or no prior land preparation (FAO 2001).

2.1.2 Air and climate change

“Climate change is a complex problem, which, although environmental in nature, has consequences for all spheres of existence on our planet. It either impacts on - or is impacted by - global issues, including poverty, economic development, population growth, sustainable development and resource management” (United Nations 2014).

Over the past century, atmospheric concentrations of carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O) and halogenated hydrocarbons, i.e. greenhouse gases, have increased as a consequence of human activity by about 40 percent, 150 percent, and 20 percent, respectively (International Panel on Climate Change 2013, 11).

Concentrations of CO2, CH4, and N2O now substantially exceed the highest concentrations recorded in ice cores during the past 800,000 years. The mean rates of increase in atmospheric concentrations over the past century are, with very high confidence, unprecedented in the last 22,000 years. (International Panel on Climate Change 2013, 11.)

In Finland agriculture is the second biggest source of greenhouse gas emissions after energy sector. It accounts for almost 9 percent of total emissions. But it has a decreasing trend. The emissions from agriculture have reduced by 13 percent since 1990 due to decreases in the amount of livestock and in nitrogen fertilization. The main reason for the
reduce of the gas emission is the change in the agricultural policy and farming subsidies. (Statistics Finland 2014, 10.)

Organic agriculture helps to reduce the greenhouse effect and global warming because of its ability to tie down carbon to the soil. Due to the various management techniques that are used by organic farming (crop rotation, cover crops, returning crop residues to the soil, minimum tillage, etc.), the return of carbon to the soil is higher, what improves productivity and carbon storage. (Food and Agriculture Organization of the United Nations 2015, 6.)

2.2 Organic certification

When today the consumer decides to purchase organic food from the shop or market, they have to be sure that what they buy is organic. In Europe only organic products can bear the EU’s organic logo or a national equivalent of it. The rest can’t be referred as organic. (European Commission 2014.) This chapter covers different organic label, European and Finnish ones. They all have similar regulation for issuing and mean that organic food product was grown, processed and packaged in accordance with the organic rules.

![EU organic logo](image)

Figure 1. EU organic logo

The main objective of the European logo (green leaf, Figure 1) is to make organic products easier to be identified by the consumers. It also gives an identity and visibility to the organic agricultural sector and “thus contributes to ensure overall coherence and a proper functioning of the internal market in this field”. (European Commission 2014.)

There are strict EU requirements for organic farmers, processors and traders if they want to use the EU organic logo or label their products as organic. It includes annual check of every operator; organic labels have to include standard list of ingredients, nutritional value, name of the producer, processor or distributor who last handled the item. It should also include the name or code of the national certification authority. (European Commission 2014.)
The Finnish equivalent of EU organic logo is called Luomu – Valvottua tuotantoa /Kontrollerad ekoproduktion (Certified Organic Production). It is granted by the Finnish Food Safety Authority, Evira, to operators whose production has been controlled by the Finnish public inspection authorities. The word “Luomu” comes from the Finnish word “luonnonmukainen” and means natural. It was introduced for the first time in 1984. (Heinonen 2014, 5.)

The Ladybird is an another label that represents organic food and is granted to Finnish and regional organic producers by Luomuliitto, the Finnish Association for Organic Farming (Figure 3). Luomuliitto is an umbrella organization for the farmers and organizations that promote organic agriculture. It was founded in 1985 and since then 18 member organizations joined Luomuliitto representing about 1,700 members. (Heinonen 2014, 4.)

A national member organization of Luomuliitto is the Finnish Biodynamic Association that is responsible for the use of the international Demeter label for biodynamic products (Figure 4). This association has its own standards for the Finnish biodynamic food...
products that were built on the international standards for biodynamic agriculture. (Heinonen 2014, 4.) “The biodynamic method has largely to do with the forming of living interactions and cannot be defined in the way the production methods for an inanimate article can be. Work done by the human hand in caring for the fertility of the soil, the plants, the seeds and propagating material, and the animals, in harmony with local conditions, can develop the farm or garden into a living organism.” (Demeter-International 2014, 5.)

According to the organic consumer barometer, the most recognizable organic logo in Finland is the Finnish sun label Luomu – Valvottua tuotantoa. 32 percent of 1043 respondents know that the product with this logo is organic and 28 percent think that it is organic. On the second place is European green leaf – 20 percent of Finns know that it means organic and 20 percent think that it is organic. 17 percent of respondents recognize Ladybird label and 25 percent think it is organic. Even though Demeter label means biodynamic, 5 percent of Finns think it means organic. (Heikkilä 2013, 15.)
3 Organic Finland

Finland is situated in the north between 60th and 70th northern parallels. Its agricultural production is limited by its climate, but also has its own advantages. Due to the cold weather there is less amount of pests and the need for the pesticides is decreased. About 9 percent of Finnish farmland is certified organic, representing a total of 193,052 hectares. Agriculture is based on family farms, the size of which is relatively small, about 39 hectares (2012). Forests are an integral part of Finnish farms. The average forest size is about 50 hectares. (Heinonen 2014, 1.)

3.1 Organic land in Finland

The first organic farms that are still in use today were changed from conventional to organic in the 1960s, but there were not more than a couple of dozen until the 1980s. In 1989 the amount of organic farmland accounted for only 0.1 percent of the agricultural land of Finland. Five years later certified organic land was 25,822 hectares, representing 1.1 percent of agricultural land. The increase in percentage was due to the state programme of financial support. (Heinonen 2014, 2.)

When Finland joined the EU in 1995, the amount of organic farms went up (Heinonen 2014, 4). Nevertheless, it was at the low level until 2005 when a new payment scheme for organic producers was launched. Since 2010 there has been a new nationwide increase, reaching the number of 4,323 organic farms in 2014 (Figure 5). The organically cultivated farmland area is 215,714 hectares (the figure includes in-conversion farms). It was increased by five percent compared to the year before. (Ministry of Agriculture and Forestry 2014, 3 & Evira 2014.) Since 2007 the government support has been 141 €/ha/year and 126 €/ha/year for organic animal production. Such agreements are concluded for 5 years. (Heinonen 2014, 3.)
Figure 5. The increase in organic area for the period 2009-2014 (Evira 2014).

“The Finnish agricultural production is mainly based on animal husbandry. About 80 percent of the agricultural area is used as pasture or for arable fodder cropping. About 17 percent of the farms are dairy farms, 6 percent beef cattle or other types of cattle farms, 3 percent pig farms and 1 percent poultry farms.” (Heinonen 2014, 1.) The main permanent crops are berries (430 hectares), followed by fruit (88 hectares). Finland has the largest non-agricultural organic area. It covers about seven million hectares. In 2011 the most popular berries were blueberries and lingonberries. (IFOAM EU Group 2012.)

According to Heinonen (2014, 3), South Savo (Etelä-Savo) and Ostrobothnia (Pohjanmaa) are the main pioneering regions for organic agriculture in Finland. “Organic farming was one of the core ideas of “the eco province” of South Savo in the 1980s.”. At the moment, the main organic areas are in southern, south-western, and western parts of Finland (Figure 6).

Figure 6. Amount of organic hectares by region 1.9.2014 (Evira 2014).
3.2 Organic catering

Restaurants use very little of organic products, less than one percent of wholesales comes from organics. The share of organics in the municipal kitchens is about 5 percent of the raw materials used. (Pro Luomu 2014.) The organic food product served on daily or weekly basis are milk, grain products and tubers. Organic meat is rarely used because of its high price and difficulties with availability. (Riski-Norja 2013, 7.)

“Catering is not within the scope of EU organic regulations and Finland has not implemented a certification system for organics in catering sector.” However, EkoCentria, a nationwide development unit that promotes sustainable food chain, has established a training programme for professional kitchens that is called “Steps to Organic” (Portaat Luomuun). It is a voluntary programme that helps to increase the use of organics as part of sustainable development. (Heinonen 2014, 7.) In 2014 2428 kitchens had joined the programme (Organic food Finland 2014).

Altogether, there are six “Steps to Organic”. To start the programme, a restaurant needs to use at least one organic product in the meal preparation on constant basis. To get to the second and third step, it is required to use at least two and four ingredients respectively. To reach fourth level, a professional kitchen has to operate with at least eight products. The fifth step requires the use of twenty ingredients in the kitchen. Those who reach the last “Star” level, have to have all their raw materials organic. (Portaat luomuun.)

According to EkoCentria (2015), Horeca sector serves over 890 million meals per year. A Finnish person eats about 165 meals a year in cafes, restaurants, canteens, nursing homes, schools, kindergartens, etc. A municipal kitchen prepares approximately 419 million meals per year. Raw materials for this amount of food cost about €350 million. EkoCentria encourages professional kitchens to produce meal services sustainably and by informing their customers about this.

Other countries, like Sweden, Denmark, Estonia, succeed more in Horeca organic food sector. For example, in Denmark in 2009, the Ministry of Food Agriculture and Fisheries introduced labels for the organic food in professional kitchens. These labels show the share of organic ingredients and it is given in percentage intervals – 30-60 percent, 60-90 percent or 90-100 percent. About 500 cafes, restaurants and public kitchens use this label. It is well recognized by 84 percent of the consumers in Denmark. (Organic Denmark 2014a.)
3.3 Attitude towards organic food

In 2012, 45 percent of Finns bought organic products regularly (once or more a month). There are different reasons why the consumers buy organic food, for example, due to its good taste, absence of residues and other health-related reasons. Some people choose organics because of the environmental reasons or because they want to promote animal welfare. The most common reason that limits the consumer from buying organic food is its high price. (Heinonen 2014, 7.)

88 percent of the Finnish consumers buy organics usually in ordinary grocery shops. Some buy in market places (27 percent), special shops (21 percent) or straight from the farms (12 percent). Three percent of the consumers purchase organic food through online shop, two percent do it with the help of food community and three percent buy organics somewhere else. 68 percent of the consumers find information about organic food and beverages from internet (excluding social media), 29 percent read organic news from newspapers and 20 percent looks for tips in the shops. 19 percent of the consumers use social media in order to find more about organics. (Heikkilä 2013, 29.)

The share of organic food sales in retail outlets was 1.7 percent in 2014. The number is the biggest in the Helsinki metropolitan area – 2.5 percent. (Pro Luomu 2015.) One of the reasons for the low demand of organic products is a good reputation of Finnish conventional food, which is perceived as pure, safe and tasty (Risku-Norja 2013, 6). The other reason is “fragmented organic sector, insufficient collection and distribution channels and long distances”. Even though the demand for organics is increasing now, the domestic organic production is not capable of corresponding to the amounts needed. Small product volumes are not suitable for large production plants. Some of these needs will be eased by increased volumes of organic production. (Government development programme for organic product sector and objectives 2013, 11.)
Even though the share of organic food sales is quite low, the organic market has developed rapidly in recent years (IFOAM EU Group 2012). According to Pro Luomu (2015), Finns bought organic food and drinks for 225 million euro last year, up from 163 in 2011 (Figure 7). The demand for organic products increased all over Europe, 5 percent in Germany and 38 percent in Sweden (Pro Luomu 2015).

In 2010 Minister of Foreign Affairs appointed the Country Brand Delegation that defined three missions for Finland that demonstrate its strengths by solving the world’s most severe problems (Heinonen 2013, 8). One of the missions is to serve organic food (Country Brand Delegation 2010, 119). One of the sub-missions is to make half of agricultural production organic by 2030. "Organic production should be made the rule, not the exception. It enables an increase in the added value of agricultural production, thus creating more local wealth." The document also mentions that the Finnish food industry must also be activated to participate since pure Finnish food and its derivatives offer significant advantages in terms of marketing and export efforts. (Country Brand Delegation 2010, 167.) One of the first results of the country brand process was founding of the Finnish Organic Research Institute, Luomuinstituutti (Heinonen 2013, 8).

In May 2013 the Finnish Government launched Organic Production Development Programme that aims at having a minimum of 20 percent of the cultivated area farmed organically by 2020. The goal has already exceeded in the provinces of Kainuu and North Carelia (Figure 8). (Heinonen 2013, 8.) But to achieve this in other regions, the organic production area should grow by at least 10 percent every year. More organic production is needed in order that the supply of organic food meets the demand in retail stores and
According to the programme, a total of 326 million euros has been allocated for supporting organic production and 438 million euros to animal welfare for the period 2014-2020. (MTT Economic Research, Agrifood Research Finland 2014, 77.)

Currently, good market conditions, favorable public attitude towards organic production, and the new Organic Production Development Programme contribute towards increasing organic production. (Organic world 2012) But there is still a lot of room for improvement.

For example, Denmark has the world’s highest organic share and the most developed organic market. In 2012, an average Danish person spent about €175 on organic products thus making Denmark the most organic country in the world. (Organic Denmark. 2014c.) According to the Organic Denmark (2014b), association of companies, organic farmers and the consumers in Denmark, due to an increase interest in origins of the products, supermarkets are now open to provide shelf space for smaller producers’ products from the local area. In 2013, Danish retail stores sold organic products of the value of about €778 million. The sales of organics of Horeca sector in Denmark amounts to €121 million. (Organic Denmark. 2014b.)
4 Methods and data collection

In this chapter, different methods to research are described and reasons for choosing questionnaire methods are provided. It is explained why the author choose certain sample for the research. The chapter also covers questionnaire design and question types.

4.1 Quantitative versus qualitative

"The quantitative method is a collection of techniques for organizing, presenting, summarizing, communicating and drawing conclusions from data, so that it becomes informative" (Morris 2003, 2). It involves numerical data that can be derived from a questionnaire, from observation, from administrative sources (Veal 2011, 34). "The main purpose of quantitative research is to make valid and objective description on phenomena. The researcher attempts to achieve objectivity by not letting his personal biases influence the analysis and interpretation of the data. Personal contact with subjects are kept at minimum." (Taylor, Williams & James 2010, 53.)

The qualitative research is typically not concerned with numbers but with information in the form of oral or written words (Veal 2011, 35). Qualitative researchers study things in their natural settings attempting to make sense or interpret phenomena in terms of the meanings people bring to them. Qualitative research involves the study of different empirical materials - case study, personal experiences, introspective, life story, interview, observational, historical, interactional and visual texts – anything that describes routine and problematic moments and meanings in individual's lives. The research analyzes context and collects most data from respondents face-to-face. (Trumbull & Watson 2010, 63.)

A questionnaire is one of the methods of quantitative approach to research. It is a system to collect information. The methods for administering surveys include telephone interviewing, self-administered mail questionnaires, and interviewing. (Sue & Ritter 2012, 3.)

The author chose the questionnaire as a method for the research for several reasons. First, a questionnaire is effective and fast to use. Second, it reaches wide geographical area, meaning Finland as a whole. Besides, it doesn’t require financial expenses. The project group conducted also three interviews but it was decided not to include the results into this thesis.
For this research, two e-mail surveys were designed – one for the Finnish producers of organic food and another for Finnish restaurants. “E-mail surveys are surveys created using survey software and accessed by respondents through a link in an e-mail invitation” (Sue & Ritter 2012, 14). Each of the respondents got an email that explained the purpose of the research and the project itself. Email also included link to the survey, contact details of the project members and thesis supervisor. Confidentiality and anonymity was guaranteed to the respondents.

4.2 Sample and participants

"The survey population consists of all the units (individuals, households, organizations) to which one desires to generalize survey results" (Dillman, Smyth & Christian 2009, 42). The sample is a subgroup of selected respondents derived from the target population (Sue & Ritter 2012, 227).

The sampling could be divided into simple random sampling and stratified sampling. "Simple random sampling gives all members of the population an equal chance of selection" (Curwin & Sluter 2004, 266). For this research the author chose stratified sampling, where “relevant groups or strata are identified before sampling begins, and samples from within each of this strata. Stratified sampling attempts to use our knowledge of the population to improve the results of the survey.” (Curwin & Sluter 2004, 267.) It was crucial to identify possible respondents beforehand since the questionnaires were designed for only organic farmers and restaurants that already use organic ingredients.

There were used various methods to find participants for the survey. First of all, author’s knowledge about different producers and Helsinki restaurants helped to find first respondents. Besides, the author participated in Pientilatori on 31st August 2014 in the restaurant Nokka, where she currently works. During the event, producers were asked for permission to send them the survey. Also Google search was used to find participants. Lahijaluomuruoka.fi website was used to get the most of the producers email addresses. Regarding restaurants, a book "Classy Finnish Restaurant" (Jörgenson, Lindberg, Lindgren & Nars) was one of the sources to look for potential respondents.

4.3 Questions types

There are three types of the questions that can be used in designing questions: open questions, field-coded question and closed-ended questions. Open or open-ended questions are questions for which the respondent writes the answer in his or her own
words. Field-coded questions are question for which the respondent provides an answer in his or her own words and the interviewer records the answer by selecting the appropriate code. (Stopher 2102, 145.) “Closed-ended questions are questions in which the possible answers are provided in the survey, and respondents are asked to choose the answer that most nearly fits their response” (Stopher 2012, 147).

In the surveys two types of the questions were used, open and closed-ended questions. Open-ended questions were created to provide respondents with an opportunity to share his/her view and to give comments. The last questions in both surveys were optional open questions and asked respondents to leave comments and further inquiries related to the research. This type of questions was also used after closed questions to obtain more in-depth understanding and to give a chance to respondents to add their own alternatives to the answers.

Most of the questions in the surveys were closed-ended questions. Closed-ended questions give higher chance of answering and makes it easy for respondents to just pick a suitable answer. Some of them asked respondents to choose one or more answers but most of them were designed to determine respondent’s attitude to the statements, whether they strongly agree, agree, neither agree or disagree, disagree or strongly disagree.

4.4 Questionnaire design

Both questionnaires used in the thesis were made through Webropol. They can be found as Attachment 1 (questionnaire for producers, English version), Attachment 2 (questionnaire for producers, Finnish version), Attachment 3 (questionnaire for restaurants, English version) and Attachment 4 (questionnaire for restaurants, Finnish version)

The language of the surveys was chosen to be Finnish since the author wasn’t sure whether respondents speak English. The first versions of both questionnaires were designed and tested in English because the author doesn’t speak fluent Finnish and the surveys have to be presented in the thesis in English. After questionnaires were tested, second member of the project team translated them into Finnish. The translation was checked by three people.
The pilot study was made with eight people. They were asked to answer one of the questionnaires as if they had a restaurant or a farm and present their comments. Most of them answered both questionnaires and it took approximately five minutes for each of the surveys. All comments were very helpful and several changes were made.

First, in questions “We have found our partners” and “We market our organic production” Expos were changed into Fairs and exhibitions; “Newspapers/magazine ads” and “Other” options were added into the latter statement. Second, question 10 in producers’ questionnaire was opened up to clarify what the author meant by “How many hours do you spend on receiving orders?” Besides, question 10 in restaurant questionnaire was lacking time realm: “How much would you be willing to pay for the service?” In the same question the price range was changed and the amount of options was decreased.
5 Key results

In total there were 13 out of 41 organic food producers and 22 out of 60 restaurants that answered the questionnaires. Out of all respondents, 11 farmers produce organic food and 21 restaurants use Finnish organic ingredients in food preparations. All of the questions were available only for the organic producers and organic restaurants. The rest of the respondents were forwarded to the last questions.

Many questions in both surveys were quite similar what made it possible to compare answers of restaurants and organic food producers. In the parts where graphs were provided to have better understanding about the differences and similarities, N1 meant the amount of producers answered and N2 – the amount of restaurant answered. But some questions were designed only for one side aiming to find specific information about their area of production (for example, Q3 in the producers’ questionnaire: “In what region is your farm located?”).

Some of the questions were designed to determine respondents' attitude towards several statements, whether they strongly agree, agree, neither agree or disagree (NAD), disagree or strongly disagree with the statements. The author used colour scheme to ease the understanding of graphs. The green colour symbolizes two “Agree” options: bright green means “Strongly agree” and light green stands for “Agree”. The grey colour represents “Neither agree or disagree”. For the sake of saving space in the graphs area, the author uses abbreviation NAD for “Neither agree or disagree”. The light brown colour was used for “Disagree” option and dark brown for “Strongly disagree”.

5.1 Producers answers

The first question that was designed only for the producers of organic food was aimed to learn the location of the farms (Q3). This question wasn’t included into the restaurants questionnaire since restaurants' location is usually limited by the location of the big cities where restaurants are able to attract enough customers, for instance Helsinki, Tampere, Turku, etc.
Altogether, there are 19 regions in Finland. Out of 11 respondents, three farmers are located in Uusimaa and three are in Varsinais-Suomi (Figure 9). Both of the regions are situated next to each other and have two big cities, Helsinki and Turku. The rest of the respondents located in Kanta-Häme, Keski-Suomi, Pohjois-Karjala, Pohjois-Pohjanmaa, Päijät-Häme.

The next question, question 5 in the questionnaire for producers of organic food had seven statements with which they had to strongly agree, agree, neither agree or disagree, disagree or strongly disagree. In this paragraph only two out of seven statements are covered, and the other five will be explained in Comparison part of the thesis. The reason for this is that five out of seven questions for producers and restaurants are the same, and it makes more sense to see the answers together to be able to compare them.

Figure 9. Areas of organic production.

Figure 10. Attitude of organic producers towards statements?
According to Figure 10, producers think it is easier to sell organic food that non-organic (seven of them agree and one strongly agree), one respondent doesn’t agree or disagree and two disagree with the statement. Three respondents think that the Finnish Government supports organic producers, while six of them do not know and two producers disagree with the statement.

![We market our organic production](chart)

Figure 11. The ways producers market organic production.

The next question was aimed at finding out how farmers market their organic production. As it is shown on Figure 11, most of them do it through their website or other websites (10 respondents), eight respondents do it through social media like Facebook and seven of them do it with the help of their partners. Producers of organic food also market their production during fairs and exhibitions (six respondents) and just few of them do it through blogs and newspapers/magazines ads. Two respondents provided open answers: “puskaradio” and “viidakkopuhelin” what means something like privately shared information.
According to Figure 12, most of the respondents sell organic ingredients via shops (seven producers strongly agree and three agree), via restaurants (five farmers strongly agree and three agree) and straight from the farm (seven respondents strongly agree and one agree). Only two of them do it online. One respondent gave an open answer: "vihannestukkujen kautta" what means through vegetable wholesale.

One of the next questions in the farmers’ survey was about organic certification. Most of the respondents use European organic label (green leaf) on their products. Three of them use Finnish equivalent of European logo, State label Luomu – Valvottua tuotantoa. Only one of them uses Ladybird label of Luomuliitto and none of them uses Demeter of Finnish Biodynamic Association.

### 5.2 Restaurants answers

In this chapter the author describes the questions that were addressed to the restaurants only. Three of them asked the respondents to agree or disagree with the following statements: "We advertise our organic menu options", "We have enough partners to order Finnish organics from", "It is important to support Finnish producers by buying Finnish organics". Two of the first questions are taken from question 4 from the questionnaire for restaurants and last one from the question 7. The author combined three statements into Figure 13.
According to Figure 13, five respondents strongly agree and seven agree that they advertise their organic menu options in restaurants. Two of them don't agree or disagree with the statement; three disagree and four strongly disagree that they advertise organic options in the menus.

Regarding the second statement, most of the respondents agree that they have enough partners to order Finnish organic from (four strongly agree and ten agree). One respondent doesn't provide an answer; three disagree and the same amount strongly disagree that they have enough partners to order organic ingredients from.

13 respondents strongly agree and eight agree with the last statement that it is important to support Finnish producers by buying Finnish organic ingredients. One restaurant doesn't agree or disagree with the statement.
Figure 14. The reasons why restaurants would start using or use more organic products.

Question 8 in the restaurant questionnaire was aimed to find out whether restaurants would start using Finnish organics or would like to use them more, if organic ingredients were cheaper, customer demand was higher, it was easier to order them and easier to find producers. Most of the respondents would use more organics if they were cheaper; 12 of them would do so, if customer demand was higher and 13 of them would agree to purchase organics for their restaurants if it was easier to find producers of organic food. Nine respondents would buy organics if it was easier to order them (Figure 14).

5.3 Comparison

The first question that was designed for both of the surveys was “What kind of organic products do you produce?” for the farmers and “What kind of Finnish organic ingredients do you use in you restaurant?” for the restaurant side. Figure 13 shows answers of the both sides combined. The Blue colour stands for the producers and red represents restaurants. Vertical axis shows the amount of the respondents in percentage and horizontal axis shows products. As we can see, restaurants use mostly fruits, vegetables, meat, eggs & poultry, bread & grains in the food preparation, while producers have more meat, herbs and vegetables to offer.
The next question addressed both producers and restaurants: “For how long has your farm been producing organic food?” and “For how long has your restaurant been using Finnish organic ingredients in food preparations?”

According to the Figure 16, most of the producers have had their farms for more than 10 years what shows that organic food is not new for them, whereas most of the restaurants have used organic ingredients for 4 - 6 years only. 19 percent of restaurants have used organic ingredients for 1 – 3 years and 18 percent of farmers have grown organics during the same period of time.
5.3.1 Do you agree with the following statements?

The next question asked respondents to agree or disagree with the statements. Each of the statements represent separate figure with two bars showing their opinions. The first bar represents restaurants’ answers and the second one shows the producers’ choices. Percentages in the bars are used to provide more accurate information regarding the amount of respondents.

![Figure 17. Attitude of restaurants and producers towards following statement: “Customers know that our products organic”](image)

The first question asked respondents' opinion to the following statement “Customers know that our products organic” for the producers and “Customers know that we use organic ingredients in our restaurant” for the restaurants (Figure 15). 64 percent of producers strongly agreed and 27 percent agreed with the statement, only 9 percent disagreed. Whereas 38 percent of restaurants strongly agreed and 33 percent agreed that customers know that they use organic ingredients. 5 percent out of all restaurants didn’t provide an opinion and 24 percent disagreed with the statement.

![Figure 18. Attitude of restaurants and producers towards following statement: “Organic food is a trend in Finland nowadays”](image)
The second statement was aimed at finding respondent’s point of view to the current situation of organic food in Finland. In other words, do they agree that organic food is a trend in Finland nowadays (Figure 18). 23 percent of the restaurants strongly agree and 58 percent agree with the statement. 14 percent of the restaurants do not agree that organic food is a trend. From the producers bar, one can see that respondents are more confident: 45 percent strongly agree and 37 percent agree with the statement, and only 18 percent disagree.

![Eating organics is good for your health](image1)

Figure 19. Attitude of restaurants and producers towards following statement: “Eating organics is good for your health”.

According to the Figure 19, all of the producers think that eating organics is good for the health, while 36 percent of the restaurants do not agree or disagree with it. As it could be seen on the first bar, 45 percent strongly agree and 18 percent agree that organic food is good for the health.

![Organic agriculture sustains the health of the soil](image2)

Figure 20. Attitude of restaurants and producers towards following statement: “Organic agriculture sustains the health of the soil”.

\[ n_1 = 11 \]
\[ n_2 = 22 \]
The last two questions address environmental issues, soil and greenhouse gas emissions. Figure 18 shows that producers are mostly sure that organic agriculture sustains the health of the soil (82 percent) and the rest of them agree with it. Most of the restaurants have the same opinion (41 percent strongly agree and 45 percent agree), while 14 percent don’t provide an answer.

![Greenhouse gas emissions](chart.png)

Figure 21. Attitude of restaurants and producers towards following statement: “Organic agriculture decreases the amount of greenhouse gas emissions”.

Regarding greenhouse gas emissions (Figure 21), more of the restaurant think that organic agriculture helps to decrease the emissions of greenhouse gas (32 percent strongly agree and 50 percent agree), while 45 percent of farmers strongly agree and 18 percent agree with the statement. 36 percent out of them do not know the answer.

5.3.2 Reasons to join the platform

This chapter describes the answers to the questions that tried to clarify the biggest reasons for respondents to join the platform and see what the current obstacles in partnerships that respondents face.

The aim of the first question was to compare the answers of producers and restaurants on how they find each other. Both of the sides do it through personal network and word of mouth (Figure 20). Restaurants do it more by word of mouth than farmers: 48 percent of them strongly agree and the same amount agree that they find partners to buy organic ingredients from by word of mouth. 36 percent of producers strongly agree and 45 percent agree that they find restaurants like that.
Internet is used by 57 percent of restaurant and by 73 percent of producers when they need to find new partners. Though fairs and exhibitions are the least favorable option for both producers and restaurants, 63 percent of farmers and 34 percent of restaurants attend them to look for possible partnerships.

![We find our partners](chart.png)

Figure 22. The ways respondents find partners.

This question was intended to clarify the amount of time restaurant spend on ordering organic ingredients from Finnish producers ("How many hours approximately did you spend last month on ordering organics?") and how much time farmers spend on receiving them ("How many hours approximately did it take for you to receive orders on organic food from restaurants/shops last month (for example, the time you spent on calls, on clarifying the orders)?").

The answers showed that most of the farmers and producers spend less than five hours on ordering process (81 percent of restaurants and 73 percent of farmers). 10 percent of restaurants and 9 percent of producers needed 5 to 10 hours; and 10 percent of restaurants and 9 percent of producers spent 11 to 20 hours last month to order organics/receive orders. One of the producers had to reserve 21 to 30 hours on receiving orders from restaurants and shops.

The next question was one of the most important one for the author and the project team because it was aimed at finding the reasons for companies to join the web-service. This
question also summarized the benefits of the possible future network: it would help companies to market their products, meaning organic ingredients and organic menu options; it would help them to find new customers and new partners; it would simplify the ordering process for both sides; and it would help restaurants and producers to be/become engaged into different environmental activities.

Figure 23. The reasons why respondents would join the network.

According to Figure 23, restaurants and producers would join the network in order to find each other and new customers. They would be also interested in marketing their products by the means of the web-service. 82 percent of the restaurants and 69 percent of the producers would want to simplify the ordering process. Both of the sides were the least interested in being engaged into environmental activities, but still 69 percent of the producers and 63 percent of the restaurants chose this option as well.

This question was designed to help the author and the project team to determine the price for using the web-service. There were offered four options: less than 50€ per month, from 50 to 100€, from 101 to 150€ and more than 150€.
As it is shown on the figure 24, most of the producers and restaurants opt for the first choice, less than 50€ per month. Nevertheless, 61 percent of the producers and 36 percent of restaurants are ready to pay a price from 50 to 100 euros a month for using the web-service. 32 percent of restaurants and 23 percent of organic farmers do not agree, neither disagree with the price. None of the restaurants is ready to pay 101-150€ for the network, although 32 percent out of them do not know. Only 8 percent of the producers agree to pay 101-150 euros and 23 percent are not sure. Most of them strongly disagree (54 percent). None of the producers would like to pay more than 150€ a month and only one of the restaurants agrees with the sum.
6 Discussion

In this chapter the final results of the surveys are analyzed and discussed. The connection to the theoretical part is made. The first part of the chapter covers research questions of the thesis (RQ) and second part describes reliability and validity of the surveys. During the discussion part, the web-service is described in more detail and the ideas on how to develop it are given. The author doesn't focus on the functionality of the platform much since it is a thesis topic of another team member.

6.1 Questionnaire findings

In the introduction part of the thesis three research questions were asked:

- What are the trends and attitudes towards organic food in Finland?
- How do the restaurants and farmers establish and maintain partnerships? How do they find and collaborate with each other?
- Is there a need for the web-service? Will the respondents be interested in joining the platform?

The first question in both surveys was created to make sure that the answers come from organic producers or restaurants that already use organic ingredients since the questionnaire was designed for them. Those farmers that answered ‘No’ were sent straight to Q11 and restaurants were sent to Q7.

The next question “What kind of organic products do you produce/use?” was a warm up question to get respondents involved into the surveys. Therefore, the results are not discussed in this chapter.

RQ1: What are the trends and attitudes towards organic food in Finland?

In the theoretical part of the thesis, some information on trends and attitudes towards organics was already given. The main points worth repeating are that the organic area in Finland is constantly growing (Chapter 3.1) and the volume of organic sales is increasing from year to year (Chapter 3.3). The Finnish Government plan is to have a minimum of 20 percent of cultivated area farmed organically by 2020. This goal has already exceed in the province of Kainuu and North Carelia (Heinonen 2013, 8). For this reason, a total of 326 million euros has been assigned for supporting organic production and 438 million euros to animal welfare for the period of 2014-2020. (MTT Economic Research, Agrifood Research Finland 2014, 77.)
In spite of what is mentioned above, the questionnaire results show that only 3 out of 11 farmers think that the Finnish Government supports organic producers. The reason for the farmers’ opinion can be that certain information doesn’t reach them or that the government plan is not clear enough on what kind of measures are taken to influence the growth of organic area. The other reason might be that the Finnish Government encourages new farmers to convert their farms to organic rather than helping already existing producers. These are all just author’s assumptions and are not based on any facts. Nevertheless, this is useful information for the project team and it means that more research should be done on governmental support. Later, this information could be provided for the Finnish farmers on our platform to help them better understand how to convert to organic farmland.

According to the Research Institute of Organic Agriculture and Finland’s report on organic agriculture (Heinonen 2014), the main regions of organic farming in Finland are Pohjoinmaa, Pirkanmaa, Uusimaa, Varsinais-Suomi and North Carelia. The questionnaire results showed that three out of 11 producers are situated in Uusimaa and the same amount in Varsinais-Suomi. The rest are located in Hame, Keski-Suomi (Central Finland), Pohjois-Karjala (North Carelia), Pohjois-Pohjoinmaa (North Ostrobothnia). As we can see from the results, respondents are situated in the biggest organic farming areas. This information helps us to map our future customers and to plan the better way to connect them.

Survey results showed that the biggest number of producers have had their organic farms for at least 10 years. It means that they got them before new payment scheme from the government was introduced and when the amount of organic farms was quite low (Chapter 3). Regarding restaurants, most of the respondents have been using organic raw materials for about 4-6 years. This is the approximate time when organic food became trendy and the biggest nationwide increase in the number of organic farms happened.

Chapter 2 in the thesis covered environmental benefits of organic agriculture, pointing out that organic farming affects the environment in a positive way. For example, it improves soil formation, creates more stable systems and helps in soil erosion control and soil biodiversity. It also mitigates the greenhouse effect and global warming. (Food and Agriculture Organization of the United Nations 2015, 6.) Survey findings show that respondents are aware of the points mentioned above. All of the producers agree that organic agriculture sustains the health of the soil and that it decreases the greenhouse
gas emissions. Most of the restaurants support these statements, although 2 out 22 are not sure and 2 do not agree. This questions were interesting for the project team because they revealed to some extent the respondents attitudes and beliefs towards organic food and maybe even the reasons why they focus on organics.

The questionnaire for organic producers shows that 8 out of 11 respondents think that it is easier to sell organic products than non-organic. However, as it was already mentioned in the theoretical part of the thesis, the market share of organic products is quite low. It shows that the consumer still prefers Finnish conventional food over organic. But at the same time, the demand for organics is constantly growing and in 2014 sales from organics reached 225 million euros. The survey respondents prove this fact: most of them support the statement that organic food is a trend in Finland. It is important result for the project team since it shows that there is a demand for organic products and the organic sector is growing, which might bring more possible customers to our future company.

According to the questionnaires results, 64 percent of producers and only 38 percent of restaurants strongly agree that customers know that their products are organic. This difference in percentage can be explained by the fact that farmers use organic certification logos on their products, while restaurants in Finland do not have any organic labels or any system that would prove the use of organics. The survey results shows that 10 out of 11 producers use green leaf logo and 3 out of 11 use the Finnish sun logo. These are the most recognizable labels in Finland, as it was mentioned in the theoretical part. At the same time, there is no certification system for organics in catering sector and it could be one of the reasons why the use of organics is so low in Horeca. There is no system to inform customers that a restaurant uses organic products. This is one of the project team ideas to create organic labels for restaurants.

In the theoretical part it was indicated that most of the Finns find information about organic food and beverages from the internet (Heikkilä 2013, 70). This is proven by the survey results, that most of the farmers market their organic products actively through websites. A lot of them do it also through social media, however only 19 percent of the consumers look for information there.

The results of the surveys covered above describe the current trends and attitudes in organic sector. One could see that the respondents are situated in the biggest organic regions in Finland. The Finnish Government aims at increasing the size of organic area by 20 percent and at increasing market share of organic products. In order to increase
market share, work in different sectors should be done. The Horeca sector is one of them. Professional kitchens in Finland use very little of organic ingredients. Those restaurants that have organic ingredients don’t advertise their organic menu options enough, thus creating lack of visibility of organics to the consumer.

RQ2: How do the restaurants and farmers establish and maintain partnerships? How do they find and collaborate with each other?

Some of the questions in both surveys were aimed at clarifying what kind of partnerships restaurants and farmers have, how often restaurants order products from farmers and how they find new partners. This questions are hard to link to the theoretical part because there is not enough of the material available in English. Therefore, the respondents replies were the biggest sources of the information needed.

More than half of the restaurants that have answered the questionnaire believe that it is important to support farmers by buying their organic food. However, only about one percent of wholesales in Horeca sector comes from organic products (Organics in Finland). “The biggest obstacle keeping people from buying organic food is the price” (Heinonen 2014, 7). It is also proven by the survey results: 19 out of 22 restaurants would buy more organics if they were cheaper. This thesis doesn’t focus on the reasons for high price of organics. The author’s assumptions are that organic food production demands higher maintenance and, since the chemical fertilizers and pesticides are prohibited, the risk of losing the crops due to insects and weather conditions is higher. Besides, the size of organic production is lower and therefore harder to organize logistics and find buyers for smaller amounts of products. However, the project team believes that this problem could be solved if a good network of restaurants and producers existed. With the help of the platform, it would be easier, for instance, for producers to find restaurants to sell products to and to find close-by producers to send their products with.

Currently, according to the survey findings, restaurants and producers find each other mostly through personal networks and by word of mouth. It is a surprising result considering the fact that internet is one of the fastest tools to look for any information or to contact other companies. From the interview with a restaurant manager (the results were needed for the second thesis and omitted in this thesis), it became clear that if a restaurant wanted to find a new producer to work with, the best way would be to ask around and choose from those someone had been working with before. It could be one of the reasons why Horeca sector still uses so little of organics. Our team hopes that our
web-service will provide possibility to go through different options fast, whether it is a restaurant or a farmer, choose the one closer/ with better selection/cheaper, etc.

The results showed that 13 out of 22 restaurants would use more organics if it was easier to find producers of organic food. It is a good result for the project team and it means that if the implementation of the web-service succeeds, restaurants would be able to find new partners easily, thus increasing the amounts of organic orders. One of the comments that was received from restaurants’ questionnaire stated that the use of organics would be larger if there production could ensure specific quantity and availability.

On average the respondents don’t spend much time on orders as it could be seen from the survey findings. Most of them need only five hours per month to work on ordering organics or receiving orders. Some of the respondents need from 5 to 10 hours and others from 11 to 20 hours to handle orders. It means that more efforts should be made on optimizing the order process to reduce the time being spent on it, which would in return help the company to focus more on its core business processes.

RQ3: Is there a need for the web-service? Will the respondents be interested in joining the platform?

The rest of the questions in both surveys were designed in order to determine whether there was a need in the platform and would any of respondents be willing to participate in the Beta version. The team wanted to see what would be the biggest reason for the respondents to join the web-service or, in other words, what interests them the most.

For the most of the respondents the biggest reasons to join the platform would be finding new partners and new customers. Some of them would like to market their organic products/organic menu options with the help of the web-service. They would also be interested in simplifying the ordering process. These three options described the main advantages of the web-service. They were also made to see what the biggest problems between restaurants and producers were. As the team presumed, the most valuable part in the idea would be creating community or network where it would be easy and fast to find new partners.

The results showed that respondents would be ready to pay less than 50€ for the web-service. However, most of them would still agree to pay 50-100€. Any higher sum is not an option for them. This question helped the project team to decide the price that
restaurants and producers would be asked to pay for their profiles and the ordering functionality.

The last question in the surveys asked the respondents to fill in their contact details if they wished to join the Beta version of the online platform. 9 producers and 8 restaurants showed their interest. This response provided the project team with 17 possible customers and reassured that there is a need in the web-service.

To conclude the questionnaire findings, there is a clear lack of a common network, where restaurants and producers could find each other, get more information about each other, to see what products are available and for what price, be able to communicate in a fast and easy way and to market their products. We hope that with the help of our web-service, new partnerships will be created and more organic products will be purchased, thus effecting the environment in a positive way.

The aim of the thesis stated in the introduction was to study the cooperation between Finnish restaurants and Finnish organic producers. In author’s opinion, the aim was achieved. The study showed that there are more and more farmers who wish to convert their farms to organic but sometimes they fail to find a buyer for their products. At the moment, the best way to do it is by word-of-mouth. The restaurants still do not use much of organics because of its price, low availability and such challenges as looking for producers and carrying out orders.

### 6.2 Validity and reliability

It is crucial to assess reliability and validity when estimating the results of a questionnaire. “Reliability is the extent to which a measure provides consistent results across repeated testing” (Sue & Ritter 2012, 227). Many respondents, for whom the questionnaires were designed, are hard to reach and hard to collect answers from. There is no common website from where they all could get access to the survey. Besides, for instance, producers often don’t have an internet connection or they don’t check their emails. Restaurant managers and chefs are too busy to spend time on surveys. The other reason is that today there are too many questionnaires what decreases the chance of getting the response.

In terms of reliability, the sample was carefully selected and sent survey link to, making sure that the right person answered the survey. The questionnaire was anonymous, what increased the reliability of responses. Many answers proved the theoretical part. The
responses were saved automatically by the means of Webropol, the survey program. Whether the respondents were sincere enough is hard to evaluate. The references used in the thesis were taken from reliable sources like Ministry of Agriculture and Forestry, European Commission, Evira, Food and Agriculture Organization of the United Nations, International Federation of Organic Agriculture Movements, etc.

“Validity refers to whether the measurement tool (i.e. the survey question) accurately and appropriately measures the concept under consideration” (Sue & Ritter 2012, 228). The questions of the surveys were designed according to the literature review and the points the project members were interested in. The aim of the research was to find out whether there is a need in the platform, therefore the surveys were developed so that it could be seen from the responses.

Each of the survey took about five minutes. The length of the questions was short. The easy questions were put first, what increased the likelihood that the respondents finish the questionnaires. All possible answers were covered, including option “Other. Please specify”. Two questionnaires were made differently considering the specific nature of each group of respondents, meaning producers and restaurants. The respondents were from different places of Finland, not only from Helsinki metropolitan area, which increased the distribution and thus the mean range of the responses. All of the respondents answered the total amount of questions.

Considering the content of the questions, one error was found. In the Finnish version of the survey, the word “ingredients” was translated to “raw materials”. Producers don’t necessarily always have organic raw materials, but they might have organic products. For the research, it was more important that the respondents use organic products, no matter whether it is raw material.

In the end it was concluded that some questions didn’t bring value and could have been easily skipped. At the same time, other valuable questions could have been asked, for instance, questions about logistics and the way respondents receive/send orders. At the moment, logistics is one of the biggest question that interests the project team. What are the ways restaurants receive organic ingredients and how do they agree on the means of transport? Do they send orders mostly by phone or email? Is there other system they might use? Nevertheless, the surveys was valid since the findings measured what they were intended to measure.
7 Learning outcomes

For the author this research was of personal interest. The finding of the survey led to the decision whether to start a new company. Among other reasons, the survey was intended to spread the word about the future company and to find beta testers for the platform.

The results showed that there is a need for a new web-service. Traditional word-of-mouth communication is no longer efficient way of looking for new partners. Phone based orders should be replaced by faster means of the internet. Environmental initiatives should be talked more. The research showed that the government encourages farmers to increase organic production but forgets to look at the other end of the chain. If there are no customers to offer organics to, no sufficient infrastructure or distribution channels, it is not worth converting all these lands into organic.

During the thesis research, organic notion and organic benefits were studied. The attitude towards organics in Finland was analyzed. It was proved that the trend in organics is growing, despite the fact that the market share is still quite low. It was demonstrated that there is a potential in organic sector, including European market.

Due to the survey findings, the project members decided to continue developing the web-service. For the moment, there are eight restaurants and nine producers interested in joining the beta version of the platform. Two of them are in the process of creating profiles.

Although, there were some minor mistakes in the survey and some of the questions didn’t have value, for the author it was important to create interest in the platform, find out the price the participants would be ready to pay and to find beta testers.

There were two big challenges for the author during thesis writing: the literature review and creating the questionnaires. The research was aimed mostly at the Finnish market and some of the information was hard to find in English. The author had to use limited knowledge of the Finnish language to look for statistics that wasn’t available in English. In author’s opinion, the process of writing the thesis would take less time if it was done by a Finnish person. The same problem appeared with designing the surveys. They were made and tested twice in both languages, which took a long time. The other challenge regarding the surveys was the fact that it was crucial to create two surveys instead of one, which then took longer to describe, analyze and compare the results.
Three project members that are behind the web-service had to write three separate theses, even though the aim of the project was the same – to create the platform and start a company. Members were highly involved into the work of each other developing new ideas together. In the current thesis, it concerns the surveys questions and the translation of them. Then the survey results were used in the work of the second member and the third member used models of the second. In our opinion, three theses should be seen as one.

Due to the smaller scope of the bachelor thesis, the author couldn’t include the consumer into the research. It would be interesting to know if the consumer gets enough information about organic producers and restaurants; what the consumers base their choice on when selecting organic products or going to restaurants with organic menu options. How much do they know about organics and would they want to know more? Is there a need for them in our platform?

Since the author didn’t focus on the consumer, the websites that sell organics for them weren’t studied. There are several of those in Finland and they are competitors of our future platform. It would be good to compare the websites for the consumers, study their development, opportunities and obstacles. How do they market themselves and where they find most of the customers?

Another interesting topic would be logistics, particularly green logistics for organic producers and restaurants; how logistics is done between those two; what the barriers for restaurant and farmers are regarding logistics; how to implement green logistics and what are the opportunities.
References


1. Are any of the products you produce organic? *
   - Yes
   - No

2. What kind of organic products do you produce?
   - Dairy products
   - Bread and grains
   - Eggs and poultry
   - Meat
   - Fish
   - Vegetables
   - Fruits
   - Berries
   - Herbs
   - Beverages
   - Honey

3. In what region is your farm located?
   - Choose from regions below

4. For how long has your farm been producing organic food? *
   - Less than a year
   - 1 to less than 3 years
   - 3 to less than 6 years
   - 6 to less than 10 years
   - More than 10 years
5. Do you agree with the following statements? *

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neither agree or disagree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customers know that our products are organic.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finnish government supports organic producers.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>It is easier to sell organic food than non-organic.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interest in organic food is growing in Finland.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eating organics is good for your health.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organic agriculture sustains the health of soils.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organic agriculture decreases the the amount of greenhouse gas emissions.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6. We market our organic production

<table>
<thead>
<tr>
<th>Method</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neither agree or disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>During fairs and exhibitions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Through our partners (restaurants, shops)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Through social services like Facebook</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Through blogs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Through our website or other websites</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>By newspapers/ magazines ads</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other, Please, specify.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7. We find new partners (shops, restaurants) to sell organics to

<table>
<thead>
<tr>
<th>Method</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neither agree or disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>During fairs and exhibitions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Via Internet</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Through our personal network</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>By word of mouth</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other, Please, specify.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8. We sell organics

<table>
<thead>
<tr>
<th>Method</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neither agree or disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Via shops</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Via restaurants</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Straight from the farm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Online</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other, Please, specify.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
9. What certification label is used on your organic products?
- European organic label (green leaf)
- State label Luomu - Valvottu tuotanto / Kontrollerad ekoproduktion
- Ladybird label of Luomutilto
- Demeter of Finnish Biodynamic Association
- Other. Please, specify. _____

10. How many hours approximately did it take for you to receive orders on organic food from restaurants/shops last month (for example, the time you spent on calls, on clarifying the orders)? *
- Less than 5 hours
- 5 to 10 hours
- 11 to 20 hours
- 21 to 30 hours
- More than 30 hours

11. Would you be interested in joining a network that brings together restaurants and producers of organic food if it helped to *

| market organic production of your farm? | Strongly agree | Agree | Neither agree or disagree | Disagree | Strongly disagree |
| find new customers? | | | | | |
| find new partners (restaurants, shops)? | | | | | |
| simplify the process of receiving the orders from your partners? | | | | | |
| be engaged into different environmental activities via network? | | | | | |

12. How much would you be willing to pay per month for the service mentioned above? *

| Less than 50 € | Strongly agree | Agree | Neither agree or disagree | Disagree | Strongly disagree |
| 50 - 100 € | | | | | |
| 101 - 150 € | | | | | |
| More than 150 € | | | | | |
13. If you are interested in participating in a prototype (Beta) of the network, please leave your contact details below.

Name

Lastname

Phone number

Email

Company / Organization

14. If you have any comments or questions, please feel free to write them here.

Attached Questionnaire for producers in Finnish

1. Tuotatteko luomuraaka-aineita? *
   - Kyllä
   - EI

2. Merkitkää minkä tyypisiä luomuraaka-aineita tuotatte, voitte valita yhden tai useamman vaihtoehto.
   - Maitotuotteita
   - Viljatuotteita
   - Munla ja silinkarjatuotteita
   - Lihaa
   - Kalaa
   - Vihanneksia ja juureksia
   - Yrttejä
   - Hedelmä
   - Marjoja ja hilloja
   - Juomia
   - Honajaa

3. Missä maakunnassa maatilanne sijaitsee?
   - Valitakaa maakunta ▼

4. Kuinka kauan olette tuottaneet luomuraaka-aineita? *
   - Alle vuoden
   - 1 - 3 vuotta
   - 4 - 6 vuotta
   - 7 - 10 vuotta
   - Yli 10 vuotta
5. Mitä mieltä olette seuraavista väitteistä? *

Merkitä riveillä oleville väitteille mielipiteenne:

<table>
<thead>
<tr>
<th>Väite</th>
<th>Täysin samaa mieltä</th>
<th>Jokseenkin samaa mieltä</th>
<th>En samaa enkä eri mieltä</th>
<th>Jokseenkin eri mieltä</th>
<th>Täysin eri mieltä</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asiakkamme tietääni tuotteidemme olevan luomua.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Halitussy tukee luomutuotteja.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Luomutuotteita on helpompi myydä kuin muita tuotteita.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kliinostus luomutuotteita kohtaan on kasvussa suomessa.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Luomuruunen syöminen on terveellistä.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Luomuviljely ylläpitää viljelymaidten terveyttä.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Luomuviljely vähentää kasvihuonekaasupäästöjä.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6. Mainostamme luomutuotteitamme

| Mainostellemme joko messuilla *                                      |                     |                          |                           |                        |                   |
| Yhteistyökumppaneittenne kautta (ravintolat, kaupat) *              |                     |                          |                           |                        |                   |
| Sosiaalisen median kautta Facebookin kautta.                        |                     |                          |                           |                        |                   |
| Blogissä *                                                          |                     |                          |                           |                        |                   |
| Oman tai muiden verkkosivustojen kautta *                          |                     |                          |                           |                        |                   |
| Sanoma- tai aiakausilehtien mainoksilla *                           |                     |                          |                           |                        |                   |
| Muulla tavalla, miton?                                              |                     |                          |                           |                        |                   |

7. Löydämme uusia yhteistyökumppaneita (ravintolaita, kaupoja) joille myymme luomutuotteitamme

<table>
<thead>
<tr>
<th>Positive attitude</th>
<th>Täysin samaa mieltä</th>
<th>Jokseenkin samaa mieltä</th>
<th>En samaa enkä eri mieltä</th>
<th>Jokseenkin eri mieltä</th>
<th>Täysin eri mieltä</th>
</tr>
</thead>
<tbody>
<tr>
<td>Markkinollia ja messuilla *</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internetin kautta *</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tuttavaverkoston avulla *</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suusanalluksesta *</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Muulla tavalla, miton?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8. Myymme luomutuotteita

<table>
<thead>
<tr>
<th>Positive attitude</th>
<th>Täysin samaa mieltä</th>
<th>Jokseenkin samaa mieltä</th>
<th>En samaa enkä eri mieltä</th>
<th>Jokseenkin eri mieltä</th>
<th>Täysin eri mieltä</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kaupissa *</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ravintoloissa *</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suoraan maatilalta *</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Verkkokaupassa *</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Muulla tavalla, miton?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
9. Mitä sertifiointimerkkiä käytitte luomutuotteissanne?

- EU:n luonumerkki (vihreä lehti)
- Luomu-valvottu tuotanto-merkki eli ns. aurinkomerkki
- Luomulennon leppäkerttu-merkki
- Biodynaminen yhdistys - demeter
- Muu, mikä?

10. Arvioikaa kuinka monta tuntia teillä kului luomutuotetilausten vastaanottamiseen viime kuussa (ravintoloihin ja/tai kauppoilta). Esimerkiksi, kauanko käytitte aikaa tilausten hoitamiseen puhelimitse viime kuussa? *

- Alle 5 tuntia
- 5 - 10 tuntia
- 11 - 20 tuntia
- 21 - 30 tuntia
- Yli 30 tuntia

11. Olisitko kiinnostuneita liittymään verkostoon joka loisi yhteistyöverkostoa suomalaisten luomutuottajien ja luomutuotteita hyödyntävien ravintoloiden välillä jos se edistäisi *

<table>
<thead>
<tr>
<th>Maatilanne luomutuotannon markkinointia?</th>
<th>Täysin samaa mieltä</th>
<th>Jokseenkin samaa mieltä</th>
<th>Ei samaa enkä eri mieltä</th>
<th>Jokseenkin eri mieltä</th>
<th>Täysin eri mieltä</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uusien asiakkaiden löytämistä?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uusien yhteistyökumppanien (ravintoloiden ja kauppojen) löytämistä?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Luomutuotteiden tilaamisprosessia?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ellinypäristön parantamista verkoston avulla?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

12. Kuinka paljon olisitte valmis maksamaan yllä mainitusta palvelusta kuukausittain? *

<table>
<thead>
<tr>
<th>Täysin samaa mieltä</th>
<th>Jokseenkin samaa mieltä</th>
<th>Ei samaa enkä eri mieltä</th>
<th>Jokseenkin eri mieltä</th>
<th>Täysin eri mieltä</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alle 50 €</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50 - 100 €</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>100 - 150 €</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yli 150 €</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
13. Jos olette kiinnostunut osallistumaan palvelun kehittämiseen (maksuttomaan Beta-versioon) ja kirja-arvontaan, jättääkää ystävällisesti yhteystietonne alla olevaan kenttään.

Etunimi
Sukunimi
Puhelin
Sähköposti
Yritys
Osoite


Attachment 3. Questionnaire for restaurants in English

1. Do you use Finnish organic ingredients in your restaurant? *
   - Yes
   - No

Next -->

(1 of 5 pages)
2. What kind of Finnish organic ingredients do you use in your restaurant?
Please, choose from one to several answers
- Dairy products
- Bread and grains
- Eggs and poultry
- Meat
- Fish
- Vegetables
- Fruits
- Berries
- Herbs
- Beverages
- Honey

3. For how long has your restaurant been using Finnish organic ingredients in food preparations? *
- Less than a year
- 1 to less than 3 years
- 3 to less than 6 years
- 6 to less than 10 years
- More than 10 years

4. Do you agree with the following statements?

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neither agree or disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customers know that we use Finnish organic ingredients in our restaurant.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>We advertise our organic menu options.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>We have enough partners to order Finnish organics from.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5. Our restaurant has found partner-producers of Finnish organic food

<table>
<thead>
<tr>
<th>Channel</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neither agree or disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>During fairs and exhibitions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Via Internet</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Through our personal network</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>By word of mouth</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other, Please, specify.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6. How many hours approximately did you spend last month on ordering organics? *
- Less than 5 hours
- 5 to 10 hours
- 11 to 20 hours
- 21 to 30 hours
- More than 30 hours

(2 of 5 pages)
7. Do you agree with the following statements? *

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neither agree or disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organic food is a trend in Finland nowadays.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>It is important to support Finnish producers by buying Finnish organic</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ingredients.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Eating organic is good for your health.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organic agriculture sustains the health of soils.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organic agriculture decreases the the amount of greenhouse gas emissions.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8. Our restaurant would use more Finnish organic or start using organic? *

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neither agree or disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>if they were cheaper.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>if customer demand was higher.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>if it was easier to order them.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>if it was easier to find producers of organic.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

9. Would your restaurant be interested in joining a network that brings together Finnish organic food producers and restaurants if it helped to *

<table>
<thead>
<tr>
<th>Benefit</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neither agree or disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>make the use of organics more visible for your customers?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>market your restaurant as a restaurant with organic menu options?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>find new customers?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>find new partner-producers of organic food?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>simplify the process of ordering organics?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>be engaged into different environmental activities via network?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

10. How much would your restaurant be willing to pay per month for the service mentioned above? *

<table>
<thead>
<tr>
<th>Payment Range</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neither agree or disagree</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 50 €</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50 - 100 €</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>101 - 150 €</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>More than 150 €</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Attachment 4. Questionnaire for restaurants in Finnish

1. Käytättekö suomalaisia luomuraaka-aineita ravintolassanne? *
   - Kyllä
   - Ei

2. Merkitkää minkä tyyppisiä suomalaisia luomuraaka-aineita käytätte ravintolassanne?
   Voitte valita yhden tai usean valintoa edellä:
   - Maitotuotteita
   - Viilatuotteita
   - Munia ja sipilkarja tuotteita
   - Lihaa
   - Kalaa
   - Vihanneksia ja juureksia
   - Yrttejä
   - Hedelmöitä
   - Marjoja ja hilloja
   - Juuria
   - Hunaja

3. Kuinka kauan olette käyttäneet suomalaisia luomuraaka-aineita ravintolanne ruoan valmistuksessa? *
   - Alle vuoden
   - 1 - 3 vuotta
   - 4 - 6 vuotta
   - 7 - 10 vuotta
   - Yli 10 vuotta
4. Mitä mieltä olette seuraavista väitteistä? *

<table>
<thead>
<tr>
<th></th>
<th>Täysin samaa mieltä</th>
<th>Jokseenkin samaa mieltä</th>
<th>En samaa enää eri mieltä</th>
<th>Jokseenkin eri mieltä</th>
<th>Täysin eri mieltä</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ravintolamme asiakkaat tietävät, että käytämme suomalaisia luomuraaka-tuoteaineita.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mainestamme ruokalistassamme luomutuotteita ja tarjoamme niitä käytössä.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meillä on riittävät yhteistyökumppaneita joilta voimmme tilata luomuraaka-aineita.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5. Ravintolamme on löytänyt suomalaisia luomutuottejakin tummansaikoista

<table>
<thead>
<tr>
<th></th>
<th>Täysin samaa mieltä</th>
<th>Jokseenkin samaa mieltä</th>
<th>En samaa enää eri mieltä</th>
<th>Jokseenkin eri mieltä</th>
<th>Täysin eri mieltä</th>
</tr>
</thead>
<tbody>
<tr>
<td>Markkinointia tai messuita *</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Internetin kautta *</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tuttavaverkoston avulla *</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suusatällisesti *</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Muulla tavalla, miten?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6. Arvioikaa kuinkaa monta tuntia ravintolaltanne kulki suomutuotteiden tilaamiseen viime kuussa. *

- Alle 5 tuntia
- 5 - 10 tuntia
- 11 - 20 tuntia
- 21 - 30 tuntia
- Yli 30 tuntia

7. Mitä mieltä olette seuraavista väitteistä? *

Merkitä käytävällä oleville väitteille mielipiteesi.

<table>
<thead>
<tr>
<th></th>
<th>Täysin samaa mieltä</th>
<th>Jokseenkin samaa mieltä</th>
<th>En samaa enää eri mieltä</th>
<th>Jokseenkin eri mieltä</th>
<th>Täysin eri mieltä</th>
</tr>
</thead>
<tbody>
<tr>
<td>Luomuruoka on tällä hetkellä trendi Suomessa.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>On tärkeää tukea suomalaisia luomutuotteja ostamalla heidän tuotteitaan.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Luomuruokaa syöminen on terveellistä.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Luomuviljely yllättää viljelymaidensa terveyttä.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Luomuviljely vähentää kasvihuonekasupäästöjä.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8. Ravintolamme käyttäisi enemmän suomalaisia luomuraaka-aineita *

<table>
<thead>
<tr>
<th></th>
<th>Täysin samaa mieltä</th>
<th>Jokseenkin samaa mieltä</th>
<th>En samaa enää eri mieltä</th>
<th>Jokseenkin eri mieltä</th>
<th>Täysin eri mieltä</th>
</tr>
</thead>
<tbody>
<tr>
<td>jos ne olisivat halvempia.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>jos asiakaskevyttä olisi suurempi.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>jos niiden tilaaminen olisi helpompaa.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>jos luomutuotteja löytäminen olisi helpompaa.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Sivu 4 / 5)
9. Olisitteko kiinnostuneita liittymään verkostoon joka loisi yhteistyöverkostoa suomalaisten
luomuottojien ja luomuottoilta hyödyntävien ravintoloiden välillä jos se edistäisi ~

<table>
<thead>
<tr>
<th>Täysin samaa miettä</th>
<th>Jokseenkin samaa miettä</th>
<th>En samaa enkä eri miettä</th>
<th>Jokseenkin eri miettä</th>
<th>Täysin eri miettä</th>
</tr>
</thead>
<tbody>
<tr>
<td>luomuraaka-alineiden näkyvyyttä astiakkaillenne?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>yrityksenne markkinointia ravintolana jolla on luomuottoevilvallkolmaa ruokalistassaan?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>uusien asikkaiden käytämistä?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>uusien luomuottojajärjestöykumppalien käytämistä?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>luomuottoilta tilaamisprosessia?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>elinympäristön parantamista verkoston avulla?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

10. Kuinka paljon olisitte valmis maksamaan yllä mainitusta palvelusta kuukausittain? ~

<table>
<thead>
<tr>
<th>Täysin samaa miettä</th>
<th>Jokseenkin samaa miettä</th>
<th>En samaa enkä eri miettä</th>
<th>Jokseenkin eri miettä</th>
<th>Täysin eri miettä</th>
</tr>
</thead>
<tbody>
<tr>
<td>alle 50 €</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>50 - 100€</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>101 -150€</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>yli 150€</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

11. Jos olette kiinnostunut osallistumaan palvelun kehittämiseen (maksuttomaan Beta-versioon) ja kirja-
arvontaan, jättää käystävällisesti yhteystietonne alla olevaan kentään.

<table>
<thead>
<tr>
<th>Etunimi</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sukunimi</td>
<td></td>
</tr>
<tr>
<td>Fuhelin</td>
<td></td>
</tr>
<tr>
<td>Sähköposti</td>
<td></td>
</tr>
<tr>
<td>Yritys</td>
<td></td>
</tr>
<tr>
<td>Osoite</td>
<td></td>
</tr>
</tbody>
</table>

12. Vastaamme mielellämme kehittämistyötä koskeviin lisäkysymyksiin. Kysymykset voi liittää alla
olevaan kentään. Kiitos kiinnostuksestanne ja osallistumisesta kyselyytemme!