Hoang Minh Chau
Nguyen Thi Kim Oanh

The Potential of Sushi and Cocktail Pairing Case: Japanese Sushi Restaurant Itsudemo, Helsinki

Thesis 2019

Abstract

Hoang Minh Chau
Nguyen Thi Kim Oanh
The Potential of Sushi and Cocktail Pairing, Case: Japanese Sushi Restaurant Itsudemo, Helsinki, 57 pages, 4 appendices
Saimaa University of Applied Sciences
Tourism and Hospitality Management Faculty, Imatra
Degree Programme in Tourism and Hospitality Management
Thesis report 2019
Instructors: Mr Jukka Moilanen Lecturer, Saimaa University of Applied Sciences.

This was a combination of research and project-based thesis. The purpose of the thesis was to innovate cocktails matching sushi's flavour and to increase the beverage sales of the restaurant Itsudemo, Helsinki. The project was sponsored by the case company.

The thesis encompasses two primary parts. The first part is research concentrating on the principle theory of flavour pairing based on aromas. Additionally, it covers background information on sushi and cocktail; and the method of innovating new cocktails. The data for this research is gathered from mainly the Internet and from literature as well. The empirical part is a project organized at the end of January. The process of choosing ingredients and innovating cocktail recipes was documented in detail. Project management, marketing plan, costs and expenses were also briefly mentioned. Throughout the event, a survey was carried out at the restaurant by handing out a questionnaire to customers to find out the most suitable cocktail to pair with sushi.

Although the study did not reach the expected sample size, the desired result of the most suitable cocktail for sushi was accomplished. Among three designed cocktails, one certainly surpassed other two to become the most favoured one and it could be applicable for any sushi restaurant. Moreover, future research could utilize this thesis for better cocktail designs.

Key words: sushi, cocktail, flavour pairing, food and drink pairing aromas.

Table of contents

Appendices

1 Introduction

It is undeniable that Japanese cuisine has been booming globally in the last decades, especially sushi which represents the most significant dish of the Japanese culture. It is very widely known that the word "sushi" is well recognized in every corner of the world nowadays. (Tsukiji cooking 2018.) Despite the fact that sushi has evolved into a trendy universal dish, pairing sushi and drinks, especially cocktails, is scarcely mentioned. The subject of this thesis is the potential of sushi and cocktails pairing which aims at acquiring knowledge on pairing food and beverage in general and pairing sushi and cocktails in more depth.

1.1 Introduction of the subject

The main objectives of the thesis are to innovate cocktails enhancing sushi flavour and to increase the beverage sales in Japanese Sushi Restaurant - Itsudemo, Helsinki.

Pairing food and drink plays an important role in gastronomy. Appropriate beverages contribute significantly to an excellent dining experience. Although a wide range of studies has been conducted on the marriage of food and drink in general, there is limited knowledge on pairing cocktails and sushi particularly. Hence, the researchers found the urge to study sushi characteristics and matching cocktail innovation. (Dornenburg & Page 2009.)

Furthermore, Itsudemo is one of the biggest sushi buffet restaurants in Helsinki selling at a moderate price at the moment. In spite of rapidly increasing revenue for over a year of operating, the importance of upselling beverages in Itsudemo is underestimated. The project planners, therefore, would like to implement this combination of project and research in order to draw more attention to drink menu and simultaneously, improve beverage sales in Itsudemo. The findings of this thesis should make an important contribution to beverages development of the restaurant specifically and pairing food and drink field generally. In addition, planning, organizing and managing an event is a challenging experience that both of the authors desire to encounter. In conclusion, this is a great opportunity to

accrue a profound knowledge of pairing food and beverages and apply it in practice.

The thesis was divided into two primary components. The first part was research containing background information on sushi and cocktail; the food and beverage pairing theory; the choices of drinks and reasons behind them; the result of the most favourable beverages for sushi by analysing the responses; and eventually identification of areas for further research. The second part was a project which was organized at the end of January. Throughout the project process, innovative cocktails were experimented, examined and finally approved by both researchers and partner before being marketed and served on the venue. On the event days, three options of new cocktails were upsold and concomitantly data on preferred cocktails were collected for the posterior analysing process.

1.2 Delimitation

The research was limited for an in-depth and concentrated study. Additionally, the field of study is limited to flavour pairing considering sushi and cocktail. Though the taste is an essential part of flavour experience, it is beyond the scope of this study to delve into the science of taste, since the pairing method mainly focuses on aroma aspect of flavour. Moreover, when studying the aroma compounds of sushi, the researchers would scrutinize those key ingredients used in Itsudemo specifically. As a result, only the alcoholic or non-alcoholic beverages that share the same aroma compounds with the ones in sushi need to be examined since it would be redundant to study all types of beverages.

In addition, this paper does not engage with complicated methods of making cocktails using machines or advanced techniques. The preparing process of cocktails will adhere to basic and simple techniques in order to minimize the time of the arrangement. In terms of innovating cocktails, selections of cocktail bases will be specialized in normal liquors in lieu of wine or vinous liquor. Besides, priority is given to ingredients that are available or can easily be purchased in Finland.

1.3   Presentation of the case company

Statistically, the number of sushi restaurants has been increasing exponentially in America as well as in many other countries (Adelstein 2017). Finland, similarly, is no exception. According to Helsinki Times (2018), in large cities and Helsinki particularly, the rapid growth of sushi establishments in the past years provides a variety of choices for sushi lovers from budget to luxury sushi eateries such as Hoku, Tokyo55 and Umeshu.

Among those favoured sushi bars in Helsinki, in spite of entering the market years later than others in 2017, Itsudemo has been flourishing and expanding rapidly to be a sushi restaurant chain with three locations at the moment and still growing. By virtue of this thriving, Itsudemo Helsinki was the chosen case for the authors to implement the thesis project and research on pairing sushi and cocktails.

Itsudemo is a newly established company operating for only over a year. Notwithstanding, the business is expanding quickly into four locations in two big towns of Finland which are Tampere and Helsinki. On 1st March 2017, the first Itsudemo was opened right in the center of Tampere at Hallituskatu 20. Shortly afterward, it was highly welcomed and became a favourite sushi place of locals. At the end of the year 2017, another Itsudemo, also the biggest one to date, was established on 1st November in the heart of Helsinki, next to Kamppi shopping center. After almost a year, the third location of the Itsudemo chain was officially opened on 18th September 2018 in Pirkkala. Continuing to develop, in the first quarter of 2019, the fourth Itsudemo has been launched on 15th February on the other side of Tampere shopping center to fulfill the rising sushi demand in the town.

As mentioned previously, Itsudemo Helsinki is the chosen location to implement the thesis project and research. This idea was conceived during the working time of two authors in Itsudemo Helsinki from summer 2018. It is the most spacious chain store with a capacity of approximately 150 seats. The food selection is deemed to be Finland's largest sushi buffet which offers over 100 different foods including sushi and hot dishes (Itsudemo n.d.). Despite the food menu diversity, options for beverages are rather limited. The drink menu consists of few basic

choices of wine, beer, and soft drinks, of which none is specially designed to pair with sushi. In view of the fact that Itsudemo is gaining momentum and continuing to expand, it is recommended to invest more in beverage variety to maximize customer spending and provide a higher satisfaction of dining experience.

1.4 Context of the thesis

The thesis consists of nine main chapters with several small sub-chapters. Introduction is the first chapter which establishes a general view of the thesis. The second chapter will give the description of the research and project by defining research problems and proposing research and project method. The third chapter would clarify the theoretical framework as well as the approach of accumulating the cocktail list. This chapter also propounds the background theories of each research question. Next, the fourth chapter involves the project development which also includes the detailed process of choosing cocktail list, theme and decoration planning, cost and pricing estimation and marketing strategy.

The following chapter elucidates the designed questionnaire in an attempt to collect the desired information. The empirical part will be reported considerately in the sixth chapter. Afterwards, the seventh chapter presents the results collected. Data will be further analysed in this chapter question by question. Then, based on the result analysis from the previous chapter, the researchers will discuss and make conclusions in the eighth chapter. In the end, the last chapter is about the evaluations of the overall thesis and its results. Besides, the researchers will propose possible suggestions for further research and actions.

2 Description of the research and project

2.1 Research problems

Pairing sushi and cocktail is an interesting, uncommon, original and rather challenging topic since there are numerous studies on pairing wine or beer with food, but it is certainly difficult to find a similar study about pairing sushi and cocktail. At first, the students chose to focus mainly on the project. However, the

researching process is taken into consideration since the flavour pairing of sushi and cocktail theory is a crucial and indispensable part of this thesis.

According to Foodpairing Inc., flavour experience involves all five of human senses, which makes the experience highly complicated. Although sight and hearing affect the experience such as the presentation of food, it is unquestionably that the flavour experience is mainly composed of the senses of taste, touch, and smell. While taste and touch make up 20% of the experience, 80% of it comes from aromas. A certain food contains several different aromas; however, there are only a few of them that identify a distinct smell of the food. Furthermore, ingredients containing similar key aromas would pair well together. (Foodpairing.) This finding inspires the students to rely on aroma compounds as the main pairing method for sushi and cocktail with the help of algorithms from Foodpairing Inc for aroma compounds identification. The research will be conducted to describe the detailed method as well as to determine its outcome.

The research should be able to answer the following questions:

1. What are the principles of flavour pairing?
2. How to pair sushi and cocktail for a better flavour experience?
3. What are the impacts of an appropriate sushi-cocktail combination?

2.2 Research and project method

Regarding the research method, quantitative research is the selected methodology for the thesis. It is believed to be the most appropriate method for a major amount of sample size. Additionally, while a qualitative method produces a thorough and rich descriptive result, a quantitative method results in non-bias, reliable and coherent data (Dowd n.d.). Therefore, the best suit for the thesis is a quantitative method.

In terms of the population, customers from Itsudemo Restaurant are obviously the researchers' targeted population. However, only those purchasing cocktail packages during the project days would be the sample. The researchers decided to sample 100 customers, hence, quantitative research is the choice for the methodology. This amount is achievable and possible as the restaurant receives

around 400 guests daily and even more during weekends. A questionnaire would be distributed to each customer after they purchase the cocktail package. This procedure would stop when the number of guests reaches the desired quantity.

When it comes to the project, the researchers decided to organize an event not only for collecting data, but also to increase the beverage sales for the restaurant. It is a win-win situation for both sides. Additionally, the project was planned to be carried out at the end of January 2019 with the theme of Japanese spring which is the most famous period in Japan for cherry blossom. The exact days were 25th, 26th and 27th January 2019. During the event days, three selected cocktails were sold in a small set with one buffet sushi as a cocktail package. Customers could purchase either the cocktail package or a separate cocktail in a bigger size. Yet, only those buying the cocktail package would receive a questionnaire for the researching purpose.

After the project, the collected data was immediately be documented using Excel in order to generate statistics based on charts and a general summary of the whole data. Thus, the students could easily analyse and draw conclusions from the data. However, the questionnaire included two open-ended questions, which were examined more carefully to summarize a major trend from the responses.

3   Theoretical framework

3.1   Flavour pairing principle

3.1.1   Flavour definition

It is commonly believed that flavour and taste are similar, or flavour is the taste of food or drink. However, flavour is actually a complex experience of food or drink including all five human senses. Most of the flavour generated comes from the sense of taste and smell. (Foodparing.) Chemically speaking, Parker and others define flavour as the sensation produced by a material taken into the mouth, and it is principally perceived by the chemical senses of taste and smell in Flavour Development, Analysis and Perception in Food and Beverages. These

two senses are so sensitive that human can easily response with low concentrations of compounds in foods. (Parker et al. 2015.)

According to Puckette in Wine Folly, the sense of taste happens when food or drink have contact with mouth and tongue. There are two kinds of receptors in the tongue. One is taste or taste-bud which is everywhere in the tongue. The other one is mouthfeel sensed by oral free nerve endings. Puckette explains how the texture of food and drink are perceived in the mouth. While taste primarily consists of sweetness, saltiness, bitterness, sourness, and umami; mouthfeel refers mainly to the body or viscosity of food or drink. The word "mouthfeel" is mostly used to describe the texture of drink or sauce, for instance, the thickness of milk. (Puckette 2014.)

Odor, aroma or smell are extremely small-scale volatile compounds that reach humans' sense of smell through the air inhaled. A person can detect aromas through both the nose and the mouth. (Foodpairing.) Volatile compounds mean they evaporate and float in the air and are easily detected by humans' sense of smell (Puckette 2014). Odor inhaled in the nose is called orthonasal smell, and the other one is retronasal smell which is detected when a person breathes out (Vaughanbell 2016). Shepherd (2012) also found out that the flavour of food or drink in the mouth is sensed by breathing out instead of sniffing in, in other words, it is evoked by retronasal smell.

3.1.2 Importance of aroma

Most of the time, people only refer to taste when describing a flavour of food. Even though there is an increasing number of researches about the role of aroma in flavour, its importance is often neglected. (Shepherd 2012.) In fact, the majority of flavour experience comes from the sense of smell. In spite of identifying five basic tastes, humans can detect hundreds or even thousands of aromas thanks to the significant sensitivity in the sense of smell. It is explained that the threshold values for aroma compounds perceived by odor receptor sites are much lower than those for taste receptors. (Parker et al. 2015.) Foodpairing also indicates that taste and touch make up only 20% of the flavour experience while the rest comes from the sense of smell through both nose (orthonasal) and mouth

(retronasal). Additionally, humans only have around 10,000 receptors to detect tastes; however, there are millions of odorant receptors (Gibson 2018). Thus, aroma is proven to be the dominant factor of flavour experience.

In the book "Neurogastronomy" published in 2012, Shepherd also affirms the principal role of smell in flavour by giving evidence and experiments to have profound insights on this statement. He claims that smell is a dual sense including orthonasal and retronasal sense in lieu of a single sense as mentioned before. While orthonasal sense is commonly acknowledged as the major type of smell during sniffing the air, retronasal smell takes longer time to be recognized as a type of smell owing to the fact that it arises from inside the mouth. Furthermore, to prove the vital role of smell in flavour especially through the retronasal route, Shepherd demonstrates a simple experiment which is called nose-pinch test. The test is carried out with a piece of candy or any kind of small bit of food. Participant will place a bit of candy on the tongue while pinching the nose to prevent air from entering and exiting the nose. Result drawn from the test reveals that without breathing out, there is no sensation of flavour since participants are only able to sense the sweet taste of candy and detect the sense of touch. This simple experiment and others with more sophisticated methods all lead to a conclusion that flavour is mostly retronasal smell.

3.1.3 Flavour pairing

It is not difficult to seek books on pairing food and drink, especially food and wine since it has become such a popular subject. For example, in a book published in 2009, Dornenburg and Page interviewed dozens of America's most experienced chefs and sommeliers to discover the rules of food and beverage pairing. Although their book concentrates on pairing food and wine, there are rules that can be applied to all kinds of food and beverages. According to the authors, the way of balancing flavours could be approached in either technique: pair to compare or pair to contrast. When referring to a food and wine pair, a number of principles are stated based on their basic tastes (sour, sweet, bitter and salty) or other aspects such as weight, richness, fruitiness/earthiness.

To illustrate, acidic foods should be compared with dried wines or with wines that are as acidic or more acidic; compare savoury dishes with sweet elements or desserts with wines that are as sweet or sweeter than the dish; compare bitter foods with tannin (bitter) wines or contrast them with fruity, full-flavoured wines; contrast salty foods with acidic wines, bubbly wines or sweet wines; compare light foods with light-bodied wines and heavier foods with fuller-bodied wines; rich foods can be compared with richer wines or contrast fatty oily foods with high acidic wines; lastly, compare fruity dishes with fruity wines and earthy dishes with earthy wines. (Dornenburg & Page 2009.)

Parallel with basic pairing rules above, there are various approaches representing different theories on pairing flavours of food and beverages. However, this paper focuses on aroma aspect of flavour, solely approaches using aromatic theory will be presented. A book by Francois Chartier (2012) demonstrates results of a scientific method used to explain the molecular mechanisms which are crucial in harmonizing flavours. Otherwise speaking, his work reveals his progress in investigating secrets of aromas or as he said *to try humbly to bring new light to wine and food pairing by exploring the aromatic path of food, wine and other beverages.* It is detected in his book that molecules are responsible for aromas. As a consequence, food and beverages that consist of same aromatic molecules may produce harmonious pairings.

Furthermore, during the research process, Foodpairing was discovered as a similar approach of pairing food and drink. The company's science director Bernard Lahousse stated that ingredients with common flavour compounds are likely to match. Moreover, a well-known theory among chefs and food scientists by Firmenich scientist Francois Bensi is that if two ingredients shared major volatile compounds, they may pair well together. For example, caviar and white chocolate go well together because of a similar compound - trimethylamine (Watson 2013.) Basically, an aroma compound is a volatile compound detected by odorant receptors through the air inhaled or exhaled during eating (Foodpairing; Parker et al. 2015). Parker and others concluded that the profile of aroma compounds mostly contributes to the characteristic flavour of a certain food (Parker et al. 2015).

Based on the essential of aroma on flavour experience, Foodpairing uses an aroma profile of ingredients as a starting point for their pairing principle and scientific research. Firstly, an aroma profile of a particular ingredient is identified through gas chromatography coupled mass spectrometry (GC-MS), which is an analysis method to separate, measure and identify a complex mixture of chemicals according to University of Bristol (2008). Then, aroma data relevant to the human sense would be extracted by their scientists. Though one ingredient might contain hundreds of aroma compounds, only some with low threshold values can determine its characteristic flavour. Secondly, the Foodpairing team creates algorithms by data analysis and machine learning to assess how well ingredients match. After years of research, Foodpairing proves Bensi's hypothesis is correct as different ingredients with common key aromas would pair well together. An example of traditional pairing is strawberry and chocolate, they both share "roasted aroma", which resulted in a perfect match. (Foodpairing.) With the credibility of the Foodpairing's research, the students decided to leverage their tool - Foodpairing Inspire Tool to find matched ingredients for the sushi and cocktail combination.

3.2 Sushi and cocktail

3.2.1 Sushi

It is certain that sushi has a long and rich history for centuries in Japan. Surprisingly, sushi first appeared not in Japan but China, supposedly in the 4th century, in this case sushi originally referred to fish preservation in fermented rice. To prevent fish from decomposition, people salted and wrapped it in fermented rice for several months. However, during this period, rice was pitched and only the fish was consumed. (Mouritsen 2009, p.14-15.)

Despite the fact that there are different records of the time in which sushi was first brought to Japan, its appearance in the country is commonly believed between 7th and 9th century (Mouritsen 2009; Sushi Faq n.d.). The Japanese not only took the concept but also developed it further and modified it into the modern form of sushi nowadays. In the long evolution of sushi, Hanaya Yohei is the most credited one for his invention of Nigiri-zushi in the early 19th century. Instead of

wrapping fish in fermented rice, he placed a piece of fish on top of a hand-shaped ball of rice which is already seasoned with salt and rice vinegar. (Sushi Faq n.d.) The development of sushi did not cease there but thrived with a wealth of local variations (Mouritsen 2009).

In spite of this diversity, there is key principle in every type of sushi these days to acquire a general definition of sushi. Mouritsen (2009) specifies sushi as the combination of vinegared rice with something on top or inside. Among a wide range of different flavours, there are five main types of sushi which are commonly offered in almost every sushi bar or restaurant. First of all, as mentioned above, Nigiri-zushi or Nigiri sushi is the original form of sushi referring to the type with a topping on top of the rice ball. The rice is formed by hand into an oblong shape and topped normally with some type of seafood, also omelette or something else can be used. (All about Sushi Guide n.d.)

The second popular type of sushi is Maki sushi which basically means rolled sushi. Maki sushi includes inside roll, inside-out roll and hand roll. Inside roll refers to the type where the rice is rolled inside seaweed. According to the size, inside roll encompasses Hosomaki (Thin roll), Chumaki (Medium roll) and Futomaki (Thick roll). Subsequently, inside-out roll, which is called Uramaki, has the rice on the outside in reverse and also finishes with roe or sesame seeds on top. Last but not least, hand roll or Temaki is a cone-shaped roll with all ingredients and rice wrapped within a sheet of seaweed into a conical shape. (All about Sushi Guide n.d.)

The third type of sushi is Oshi sushi which means pressed sushi and is also known as boxed sushi originating from Osaka. This variety is made by pressing layers of ingredients consisting of sushi rice, condiments and toppings with a wooden mold. The sushi is afterward cut into a neat rectangular or square before serving. Inari sushi is the next type of sushi which is different from other kinds mentioned before because it does not contain any fish and has sweet flavour. Inari sushi is made by filling a pouch of deep-fried tofu with vinegared sushi rice. However, the rice can also be mixed or topped with other ingredients such as mushroom, prawn or squid. (All about Sushi Guide n.d.)

The final type of sushi is Gunkan maki, another type of maki or rolled sushi. Its name literally means battleship, comes from its shape which is similar to a little ship. It is made by wrapping a broad strip of seaweed around a rice ball then filling the remaining room on top with diverse ingredients. (Gurunavi 2017; All about Sushi Guide n.d.) Apart from those main types listed above, there are many other regional variations of sushi, however, this thesis concentrates on the sushi types that are the most popular and especially served in Itsudemo restaurant.

In the case of Itsudemo, the restaurant offers one of the largest sushi selections in Helsinki including all the main types of sushi listed above. For Nigiri sushi, the salmon topping is the most popular on the buffet counter with both fresh and smoked version. The second typical topping on the menu is shrimp which also offers two choices between boiled and deep-fried shrimp. Besides, the minority of Nigiri sushi topping consists of octopus, beef, omelette, unagi, etc. Regarding Maki sushi, this type probably makes up the most space on the sushi buffet table by virtue of its diversity in the size and the filling. However, the core ingredients in most of the rolls are avocado, cucumber, salmon and crabmeat. In addition, the rolls encompass an insignificant amount of seasoning on top such as sesame seed and salmon roe.

Oshi sushi might have the smallest selection on the buffet table of Itsudemo with only a few choices. A layer of fresh salmon is pressed on top of different layers of coloured vinegared rice. Therefore, salmon once more plays the main role in contributing to the flavour of sushi. In Itsudemo, the only type of Inari sushi is also the typical one with a pouch of deep-fried tofu on top. This Inari sushi is highly preferred by children because of its sweet taste. At last, Gunkan maki, which in this case is specially made for vegans, is filled with blended corn or seaweed. Finally, it is concluded that the key ingredients taken into account for pairing are seaweed, salmon, shrimp and avocado.

3.2.2 Cocktail

What is the origin of the word "cocktail" or how does the word "cocktail" come to be related to mixed drinks? There are numerous legends and myths about the history of cocktail. In the book *Booth's Handbook of Cocktails and Mixed Drinks*,

John Doxat recounted several legends behind the name "cocktail" from various states of the United States and even from Mexico. Although they are all unproven viral tales, there is at least one fact about the first description of cocktail in print. In an American journal named The Balance published in 1806, a Cocktail was described as *a stimulating liquor, composed of spirits of any sort, sugar, water and bitters.* (Doxat 1996.) This definition is still used when mentioning the ideal cocktail. Moreover, Merriam-Webster, as cited in Graham (2019), gave a broader definition of cocktail as *an iced drink of wine or distilled liquor mixed with flavouring ingredients.* This description refers to practically any types of mixed drink as a cocktail whereas the Oxford Dictionary stated cocktail as *an alcoholic drink consisting of a spirit or spirits mixed with other ingredients, such as fruit juice or cream.* (Graham 2019; Oxford Dictionary.)

There are three key components in a cocktail which are base, modifier and flavouring or colouring. The base is fundamental ingredient and specifies the type of the cocktail. It is normally liquor such as vodka, tequila, rum, brandy or gin, however, in some cases, the base could be a mixture of vinous liquors or aromatic wines. Additionally, a cocktail base usually comprises a single liquor, notwithstanding, it is acceptable to combine two or more liquors to create a base. (Ellis 2012.)

Speaking of modifier, it is added to the base in order to round off the sharpness of the liquor and simultaneously highlight the natural flavour of the base. Nevertheless, the flavour of the modifier should not overpower but remain immersed in the flavour of the base. Modifiers are typically classified into three classes which are aromatics such as aromatic wines and bitter; fruit juice such as orange and apple; and miscellaneous smoothing modifiers such as egg and cream. (Ellis 2012.)

The last component of a cocktail is flavouring or colouring which could be a wide range of liqueurs or non-alcohol fruit syrup. Furthermore, the ingredient that plays as a modifier in this cocktail could be flavouring or colouring in another. Similarity to the modifiers, flavouring or colouring factors should not predominate the flavour of the cocktail base. (Ellis 2012.)

There are various techniques concerning creating cocktails. However, the first lesson of a bartending class usually includes basic skills of shaking, stirring, blending, muddling, straining, layering, building and flaming. First of all, shaking is needed if the cocktail consists of egg, fruit juices or cream. By adding ice to the shaker, all the ingredients will be mixed thoroughly and cooled down simultaneously. Next, stirring will work effectively with a stirring rod. For this method, ice cube is suggested to use instead of crushed ice due to dilution resulting from ice melting.

Regarding blending, an electric blender is an indispensable tool to create a concoction. The recommended order of ingredients is fruits, liquids and alcohol, then finally ice if needed. This order assists in mixing fruit perfectly with alcohol. The muddling method is used when fresh fruit or mint leaves are required to be extracted. A certain flavour from fresh fruit for the recipe could be expounded by crushing the ingredients with a muddler. (David 2012; Drinks Mixer n.d.; Sweet Cocktails n.d.)

The following method is straining which is done with a strainer. It is certain that crushed ice is apt to jam the strainer, ice cube therefore should be used instead. Layering is to layer a liquid on top of another. The key to successful layering technique is the knowledge on weight of a certain liquid since the heavier ingredients will remain stayed under the lighter ones. Then, building method is done by pouring all the ingredients in the served glass. These ingredients could float on top of each other or be mixed with a swizzle stick. Lastly, the method to make the most appealing cocktail is flaming. The alcohol is advised be warmed up before being ignited. This method has to be attempted with caution and requires full attention during making and serving process. (David 2012; Drinks Mixer n.d.; Sweet Cocktails n.d.)

Apart from basic techniques mentioned above, there is a more complicated method to create cocktail, such as molecular mixology which applies molecular gastronomy techniques to traditional mixology (Molecular Gastronomy n.d.). Notwithstanding, the basic techniques are prioritized in this project to minimize the time of preparing for a mass number of customers.

3.2.3 Pairing sushi and cocktail

The information on pairing sushi and cocktail specifically is more likely to be found on the Internet. There are several articles about how to pair sushi with a drink. In the article published recently, Swartz (2019) has interviewed several experts of an upscale Japanese restaurant in Stamford, to find out the answer. He concluded that the same as pairing food and wine, *when matching cocktails and sushi, the key is light with light, and power with power.*

Another guide from a sushi restaurant states that a drink should complement instead of competing with the flavours of sushi. Cocktails made with ginger are suggested to pair with sushi for the best flavour combinations. Other rules are also indicated when pairing any kinds of drinks to sushi. For instance, choose the similar acidity levels or similar weights and textures. (Shinto Restaurants 2015) It is similar to the common rules of pairing food and wine as mentioned in the previous subchapter.

Although there are different beverage suggestions, most of them recommend to take flavour of fish into consideration as it is the foremost ingredient. This is evidently because of the very wide rage of toppings and fillings in each sushi. Since it is undoubtedly tricky to match the beverage with all those ingredients, more consideration will be given to the most principal elements of sushi. (Beckett 2019; Swartz 2019; Shinto Restaurants 2015.) In the case of Itsudemo restaurant, the key ingredients would be salmon, avocado and shrimp.

To delve deeper into the aromatic aspect, the researchers use Foodpairing Inspire Tool to discover the most suitable food and drink pairing. Compared to five basic types of taste, aroma could be categorized into fifteen different attributes, which is demonstrated in the aroma wheel. Foodpairing utilizes the aroma wheel in the process of identifying aroma characteristics. It is a visual support to determine key aromas of one ingredient.

For example, "salmon" has key aromas of floral, green and woody as shown below in Figure 1. Foodpairing suggests the best matches for salmon based on these which share common aroma characteristics of floral, green and fruity aromas. In the result, there are various ingredients ranging from vegetables,

meat, fruit to drinks with the best matches shown first. The detailed description of matching each ingredient will be presented in the next chapter which is the empirical part of the thesis along with experimenting and examining process.
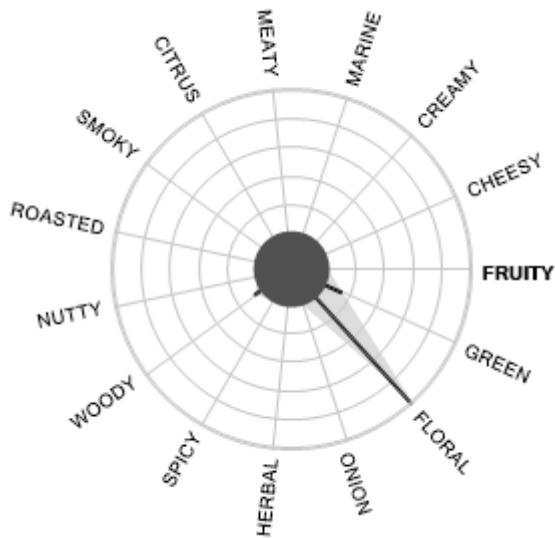

Figure 1. Salmon aroma wheel (Foodpairing).

3.3 Impact of the combination

The ultimate purpose of pairing food and beverages is to enhance the flavour experience. Pairings should be able to bring out a dish's flavour, not overpower it (Wolf 2018). At top restaurants in America where food and beverage are acknowledged as an indispensable feature of unforgettable dining experiences, chefs always collaborate with sommeliers in an attempt to create the ideal marriages of food and drinks. The experience of the pair would be greater than enjoying either on its own. Daniel Boulud, Chef-Owner of seven restaurants in New York City, also admits the inseparable role of food and beverages by consistently mentioning food and beverage in a pair and indicating the advantages of the combination. In brief, the idea that food and beverage pairing provides a peak dining experience can be concluded in a figurative and non-mathematical but suitable expression 1+1=3. (Dornenburg & Page 2009.)

In fact, there is a limited number of research and information on pairing sushi and cocktail particularly, mutual impact of sushi and cocktail is thus hardly found. Nevertheless, it is not impossible to detect a few of cocktail recommendations to

compliment sushi. For instance, Rick Zouad, beverage and service director at Sushi Seki, suggests that an appropriate acidic cocktail could break through the fat and boost the sweetness of the fish or an umami-rich cocktail would be sushi friendly and give it an extra umami kick. (Archibald n.d.) Apart from those possible impacts, the practical experience of customer is expected to draw more valuable results regarding the specific cocktails that the students create. In the end, each customer would perceive different flavour experience resulting in varied opinions, yet the complimenting between sushi and cocktail is the principal aim of researchers.

4 Project development

4.1 Project description

Deriving from the mutual interest in event planning, the students easily found consensus on organizing an event to upsell beverages at the restaurant as well as collect data for the research. This can be defined as a project since it takes temporary endeavor to produce an outcome (PMI). To successfully manage a project, different phases need to be taken into account. Joseph Heagney (2012) demystifies five phases of project management which act as a roadmap to navigate.

The first phase is conception which initiates the idea of a project and see the need of conducting it. Definition is the second stage in which, project problem will be defined and agreed upon, also project team is required to develop vision and write down mission statement. The following stage is implementation planning including tactics and logistics. This phase is the key to success and concentrates on developing strategy which will be followed later on and measure mall the materials and other supplies needed to complete the job. Once the team approves the plan, project can be proceeded to the next phase called execution. At this stage, the plan will be performed and controlled to ensure to follow up the plan. Other action also could be taken when deviations happen during the progress. Last but not least, closeout stage will be carried out after completing the job. Evaluation and review will be discussed and valuable lessons will be drawn for the future job. (Heagney 2012, pp. 10-14.)

Owing to the fact that this is a small-scale project mainly conducted by two students, it is not necessary to go through all the phases as in theory. However, it is a useful roadmap supporting the students during the project process. In this case, the event in Itsudemo organized to sell the potential cocktails is a practical way to examine whether the researchers could fully utilize the theories. Japanese Early Spring is the event theme which inspires the cocktail names as well. The event lasted from 25th to 27th January 2019. During these days, customers could purchase a small set of three cocktails with buffet sushi as a package deal or a separate one in a bigger size. Questionnaires were handed to customers buying the package deal in order to find out which is the most suitable cocktail for sushi among those three. The goal was to sell 100 cocktail packages for the same sample size.

4.2 Cocktail menu

4.2.1 Ingredients pairing

4.2.1.1 Steps for choosing cocktail ingredients

Selecting the matching cocktail ingredients consists of the following steps. First, the researchers determined the most used ingredients in Itsudemo sushi. Itsudemo has a wide variety of sushi, nevertheless, the most common ingredients appearing in Itsudemo's sushi are salmon, avocado and shrimp. Seaweed with only woody aroma, obviously, is used in all sushi; thus, any ingredient with woody aroma would be a promising choice. Selections for cocktail ingredients are based on these main ingredients.

Secondly, the students searched for the matching ingredients including alcoholic beverages, fruits, and herbs. As the cocktail should match with not only one certain type of sushi but also others, cocktail ingredients pairing well with most of the main sushi ingredients were considered as the greatest options. Additionally, ingredients labelled "Best match" were likely to be chosen (This label system will be explained in the next sub-chapter).

The third step was to choose the base alcohol - different strong alcohols for three cocktails. Foodpairing provides aroma wheels of almost 2000 ingredients, yet there are numerous ingredients, especially numerous alcohols without aroma

attributes. From this point, the availability and cost-efficiency of ingredients come into view. If certain matching alcohols are not available in Finland, it is a necessity to find suitable substitutes. Subsequently, the students continued to choose matching fruits and/or herbs in order to build a cocktail recipe.

4.2.1.2 Match ingredients

The table below made by the students would present more comprehensively the selected match ingredients followed by their lists of key aromas and how well they match. The key aromas of each ingredient are arranged from the most to the least significant ones. Besides, some ingredients have several main aromatic characteristics while others might have only two.

Best match: BM; Good match: GM; Match: M.

Ingredients (with key aromas)	Salmon (floral, green, woody)	Shrimp (roasted, floral, green, nutty, marine, fruity)	Avocado (fruity, citrus, green)
Alcohols			
Cointreau (green, fruity, floral, spicy, roasted, citrus)	BM	M	GM
Nolet's Silver Dry Gin (fruity, floral, spicy, herbal, nutty, roasted, citrus)	GM	GM	M
Metaxa (floral, fruity, citrus, spicy, green)	M	GM	M
Peachtree Dekuyper (fruity, spicy, citrus, floral, woody, nutty)	GM	M	M
Fruits/vegs/herbs			
Guava (green, fruity)	BM	M	BM
Lychee (floral, herbal)	GM	GM	GM
Raspberry (green, floral)	GM	-	M
Strawberry (fruity, green, roasted)	GM	GM	GM

Grapefruit (fruity, citrus, spicy, woody, herbal)	-	M	GM
Orange (citrus, spicy, fruity, green, floral)	GM	M	GM
Lemon (citrus, fruity, green, floral, herbal)	-	-	GM
Peach (fruity, green, floral, nutty, spicy)	-	M	GM
Cucumber (green, fruity)	BM	-	GM
Rosemary (herbal, floral, woody, spicy, citrus)	-	M	BM
Mint (herbal, spicy, green)	-	-	GM
Other			
Tonic water (spicy, floral, roasted, green, fruity, citrus)	-	M	M

Table 1. Ingredients match

4.2.1.3 Potential of cocktail recipes

After searching for match alcohols for main sushi ingredients, the researchers discovered the three alcohols matching in all sushi ingredients - Cointreau, Nolet's Silver Dry Gin and Metaxa. Thus, they are considered the base alcohols. From these alcohols, the researchers decided on potential components for three cocktail recipes. The three cocktails are the result of different ingredient combinations producing various aromas in attempt to match all main sushi ingredients.

The first cocktail contains the base alcohol - Nolet Silver Dry's Gin, guava, strawberry, raspberry and tonic water. Key aromas of the first cocktail are floral from gin and raspberry, green from guava and fruity from berries. All aromas can be found in the chosen sushi ingredients. Hence sushi's flavour is expected to pair well with this cocktail.

Metaxa is chosen as the base alcohol for the second cocktail bringing in a strong floral and spicy note. Fresh fruits and herbs or juices and syrups with lychee,

cucumber, rosemary and mint would add more aromatic characteristics, especially herbal, to the drink. A herbal yet neutral beverage like this one could complement sushi's flavour yet not overpower it.

The last cocktail used Cointreau as the base with citrus, fruity and floral aromas. By adding Peachtree Dekuyper and citrus fruits like grapefruit, orange, lemon and fruity peach, the citrus and fruity notes are more intensified and significant. Furthermore, these ingredients bring in noticeable woody aroma that certainly matches with dried seaweed.

As can be seen in Table 1, some ingredients are not directly matched with the main sushi ingredients. Yet, they would match with the alcohols or other ingredients; thus, it is somehow an indirect match, which will be explained visually by the photos below.

- Salmon

In the first match with Gin (Figure 2), salmon and Nolet's Dry Gin sharing the same floral aroma combined with the similar green and fruity aromas from guava creates a suitable combination. Additions of raspberry and strawberry which contain green, fruity and floral aromas would add some freshness to the cocktail.
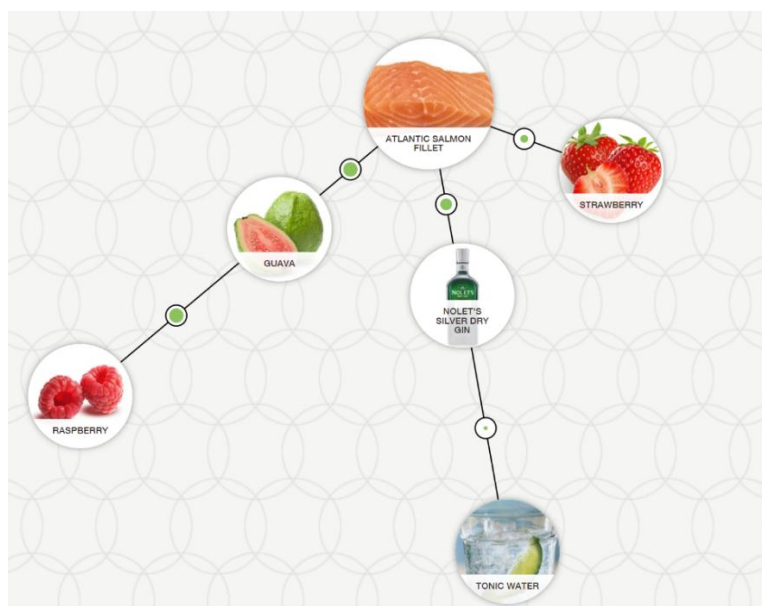

Figure 2. Salmon match with Gin (Foodpairing).

There are two aromatic links between salmon and Cointreau. Moreover, the same can be seen for salmon and Peachtree Dekuyper. With the citrus and fruity characteristics from both alcohols, they would pair well with citrus fruits like grapefruit, orange, and lemon as well as peach (Figure 3).
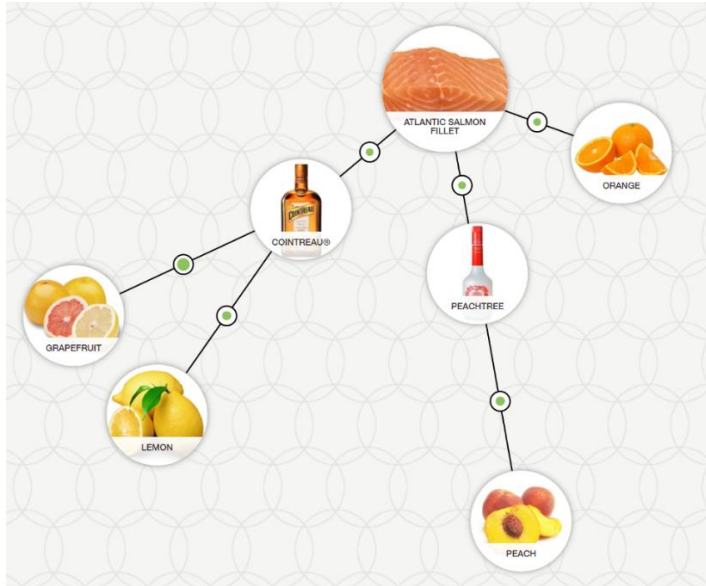

Figure 3. Salmon match with Cointreau (Foodpairing).

Herbal and floral aromas are the key characteristics of the last combination. Moreover, in order to not overwhelm the fish flavour, a more neutral aroma like green from cucumber is added to the cocktail (Figure 4).
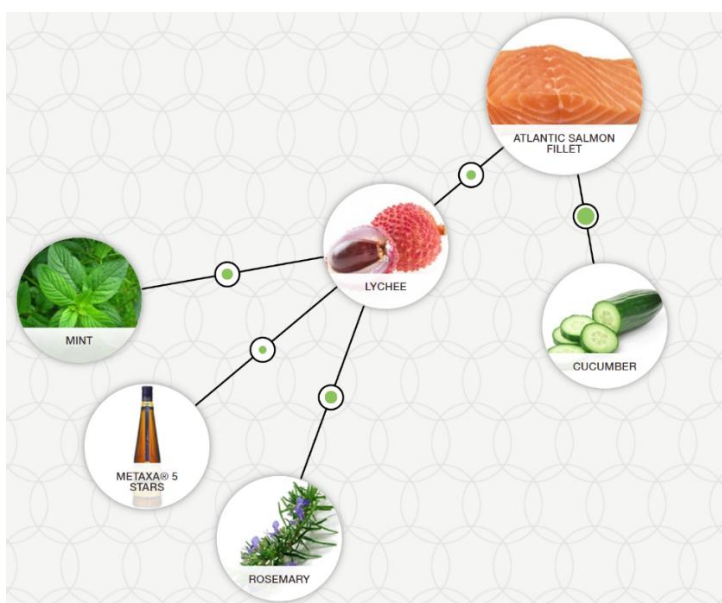

Figure 4. Salmon match with Metaxa (Foodpairing).

- Shrimp

The floral and green aromas are found in shrimp, Metaxa and rosemary; thus making them a great combination. Besides, cucumber brings some freshness from green and fruity aromas that also link to those in shrimp. A subtle kick of spiciness and herb from mint would enhance the cocktail flavour overall.
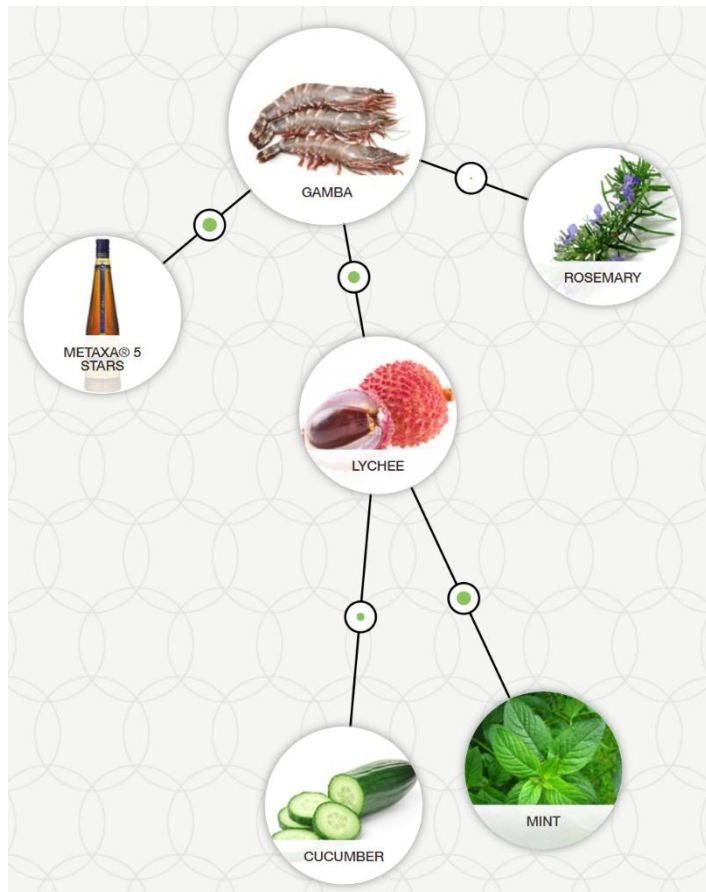
Figure 5. Shrimp match with Metaxa (Foodpairing).

Both photos below show a suitable match among shrimp and other ingredients. Although they are not the best matches, the cocktail ingredients all contain at least one aromatic link to shrimp. Particularly, while the Gin cocktail emphasizes the roasted and floral notes in the shrimp (Figure 6), the other one would bring out the fruity notes from the shrimp (Figure 7).
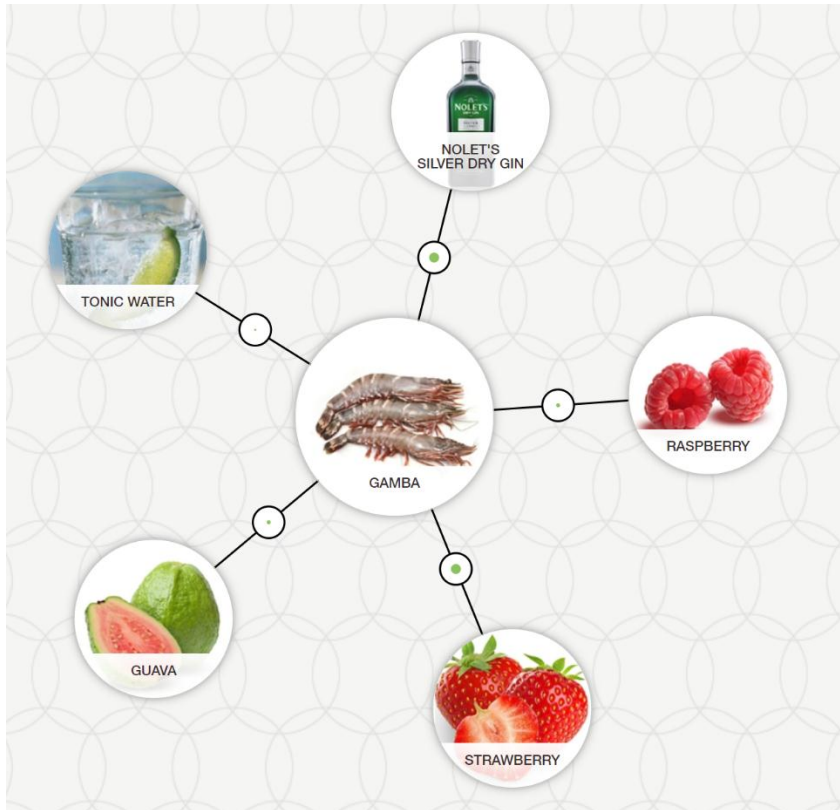
Figure 6. Shrimp match with Gin (Foodpairing).

Figure 7. Shrimp match with Cointreau (Foodpairing).

- Avocado

Out of three sushi ingredients, avocado has at least one direct aromatic links with each ingredient of all three cocktails. Thus, it could be said with certainty that avocado would pair well with all three cocktails (Figure 8,9,10).

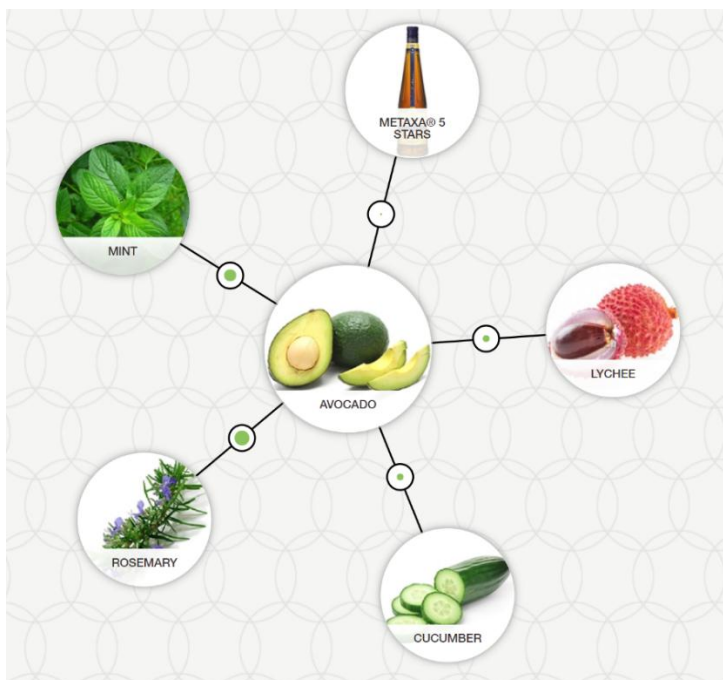Figure 8. Avocado match with Cointreau (Foodpairing).

Figure 9. Avocado match with Metaxa (Foodpairing).
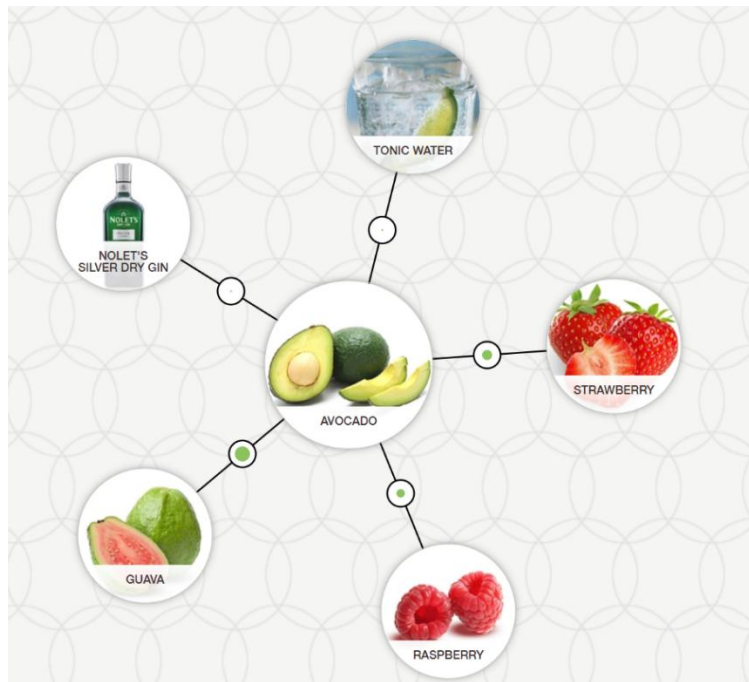
Figure 10. Avocado match with Gin (Foodpairing).

4.2.2 Cocktail mixing & trial

From the potential components mentioned in the previous part, three cocktail recipes were invented as follows. Due to availability in Finland and changes for variety, the students altered some ingredients with similar ones.

- Cocktail one - Gin: floral, fruity and green notes
    - Kyrö Napue Gin 46.3%
    - Bols Strawberry 17%
    - Guava juice
    - Smashed raspberry
    - Raspberry syrup
    - Tonic water

Unfortunately, there is no Nolet Silver Dry's Gin available in any Alko store, which is the Finnish alcoholic beverage retailing monopoly (Alko). Hence, the students replaced it with Kyrö Napue Gin as it contains some similar notes, for instance, blossom (floral), spicy, citrus and fruity from cranberry (Alko n.d.a). With the cranberry note, it would certainly go well with other berries. Besides, instead of fresh strawberry, a strawberry flavoured liqueur would make the cocktail more

interesting. Guava is probably an exotic fruit in Finland; thus, the students only managed to find its juice. Thus, to balance out the sweetness, smashed frozen raspberry would add some fruity and acidity to the cocktail.

- Cocktail two - Brandy (Metaxa): herbal, spicy and floral notes
  - Metaxa 5* Greece 38%
  - Lychee juice
  - Cucumber and Rosemary juice
  - Green Mint Syrup

For this cocktail, Metaxa 5-star Greece was specifically chosen as it is the only Metaxa available in Alko. Yet the brandy still has strong herbal, spicy and floral notes (Alko n.d.b). Similar to guava, lychee juice is the most feasible option. The students incorporated cucumber and rosemary to the cocktail by blending them with some water for juice. A little bit of green mint syrup would add some nice colour and flavour to the cocktail.

- Cocktail three - Liqueur (Cointreau): citrus, fruity, floral and woody notes
  - Cointreau 40%
  - Koskenkorva The Original Peach 21%
  - Pink Grapefruit Syrup
  - Lemon juice
  - Orange juice
  - Smashed peach

As an orange-flavoured liqueur, Cointreau will provide the cocktail with the main citrus and fruity aromas (Alko n.d.c). Instead of Peachtree Dekuyper, the students could only find Koskenkorva The Original Peach, yet it still contains the citrus and fruity notes from ripe peach (Alko n.d.d). Because the key aromas of this cocktail are citrus and fruity, the students used lemon juice, orange juice and smashed peach together with the pink grapefruit to balance out the sourness. Moreover, the cocktail shares the woody aroma with dried seaweed, also known as nori, which is used in all sushi.

The most practical and efficient cocktail mixing method for the event day is stirring because of the large number of cocktails. All cocktails are prepared in advance

for time-efficiency. When ordered, the students only need to pour them in glasses and garnish.

During the trial, all three cocktails were adjusted for appropriate ratios to balance all the flavours. However, alcohol contents in each cocktail must follow strictly the Finnish Alcohol Act. For instance, pouring size for strong alcoholic beverages is 4cl and for mild alcoholic beverages containing more than 15% of alcohol is 8cl (Mykkanen 2018). The cocktails were tested and approved by Itsudemo's owners and the manager. Final cocktail recipes are presented in the next section.

4.2.3 Three final cocktail recipes

- Haru no Hana/ Spring Blossom (18cl)
    - 3cl Kyrö Napue Gin
    - 2cl Bols Strawberry
    - 1cl Raspberry Syrup
    - 6cl Guava juice
    - 6cl Tonic Water
    - 30g Frozen raspberries
    - Ice

Smash the defrosted raspberries.
Pour in all liquids with ice then stir thoroughly.
Garnish with some raspberries.

- Haru no Shibafu/ Spring Grass (18cl)
    - 4cl Metaxa
    - 1cl Green Mint Syrup
    - 6cl Lychee juice
    - ⅓ of cucumber
    - 3 sprigs of rosemary
    - 10cl water
    - Thin slices of cucumber
    - Ice

Blend the cucumber and 2 sprigs of rosemary with water for juice, then filter for the juice only.

Pour in all liquids with ice then stir thoroughly.

Garnish with a sprig of rosemary and some slice of cucumber.

- Haru no Hizashi/ Spring Sunshine (18cl)
  - 3cl Cointreau
  - 2cl Koskenkorva The Original Peach
  - 1cl Pink Grapefruit Syrup
  - 3cl Lemon juice
  - 10cl Orange juice
  - 4-5 pieces of canned peach
  - Slices of lemon for garnish
  - Ice

Smash the canned peaches.

Add all the liquid with ice and stir thoroughly.

Garnish with some slices of lemon.

Photo 1. Cocktails

The recipes above are for normal size cocktails of eighteen centilitres served in a rock glass. In the set of three cocktails, each small size cocktail only contains six centiliters served in cordial glasses.

One cocktail set = 3x6cl cordial cocktail = 18cl cocktail

4.3   Theme and decoration

The theme of the event as agreed upon is Japanese spring which is the most famous period in Japan for cherry blossom. In fact, Japanese spring usually starts from March and last until around May, however, the event was held at the end of January. For that reason, "Japanese Early Spring" was the chosen name for the project. In addition, in the middle of Finnish winter, at which time snow was falling on every part of Helsinki and the whole town was freezing at the temperature of minus 20 degrees centigrade, an unusual "early spring" would be intriguing and arouse people's curiosity. The project planners, moreover, wanted to bring a refreshing and delightful atmosphere of Japanese spring and cherry blossom to embellish Finnish plain white winter.

Evidently, the project planners opted the colours of cherry blossoms as the theme colour which varied from white to different shade of pink. Hence, all the decorations would be one of those matching theme colours. To reduce expenses on disposable ornaments, both event organizers agreed on keeping it simple, only accentuating some main areas to achieve the desired effects. Uncomplicated crafts were prioritized when designing decors as one way of showing Japanese culture.

Speaking of Japan, origami is a typical paper folding art which related to Japanese culture. Especially, crane in Japan is considered as a mysterious creature that can live for a thousand years. It is thus called "bird of happiness" symbolizing good fortune and longevity. Folding a thousand of origami cranes is believed to make wishes come true. (Namisato 2011.) For this beautiful meaning, dozens of white cranes adorned by a little roseate flower on each wing were hung on the restaurant window under the starry string lights which created the romance particularly for the window seat tables. Although there were not thousands of cranes, two event planners wished good fortune and long healthy life to all

customers. This window decoration could also be enjoyed from the outside, it deliberately drew attention of people passing by on the street.

Photo 2. Window decoration

In the ceiling, lantern with the same material, paper, was selected to grace the buffet counter as well as the entrance of the restaurant. Paper lantern in Japanese culture traditionally represents joy and celebration. Meanwhile, cherry blossom or Sakura flower is symbolic flower of Japanese spring. Due to the fact that blossoms only flourish for around two weeks before falling, sakura flower represents the fleeting nature of life. Eating, drinking and gathering underneath the cherry blossoms becomes a tradition in Japan which makes people merry. (Takeda 2014.) For these reasons, on the ordinary white paper lantern, cherry blossom sprigs were handcrafted dedicatedly to bring the joyful Japanese spring feast atmosphere to the restaurant. All the lanterns then were strung in lines along the register and buffet counter area so that customers were able to notice them from their first step in.

Photo 3. Ceiling decoration

Beside window cranes and ceiling lanterns, a cherry blossom tree was also handcrafted and placed at the door to welcome and attract customers' attention. This tree was not just an ornament but rather a wishing tree. To have a wish granted, customer was free to make offering in forms of little notes. A great deal of light pink notes were therefore sorted to put on a small table next to the tree, ready to be filled with lovely wishes and hung on the branches of the tree. In addition, this entrance decoration also created a check-in area for customers to take photos and save wonderful memories of Japanese spring with their friends or family when coming to the restaurant. Likewise, the register table for cashiers was highlighted by a little vase of cherry blossom branches. Instead of customers' wishes, pink notes on this branch were greetings and welcoming from staff members written in Japanese to show delicacy and sincerity.

Photo 4. Handcrafted cherry blossom tree

4.4   Cost and pricing

Cost management is a way of managing all the costs of the project. An estimation of all the costs has to be made from the beginning of the process. Project cost management is very important in keeping the project on track within the budget. A project budget could be developed to follow a set of actions throughout the project. This includes labor costs, material costs, travel costs, equipment expenses, etc. In addition, there are more difficult costs for example telephone charges, office space, general administration costs or company insurance. (Bridges 2018.)

This project was sponsored by and organized at Itsudemo restaurant, therefore it was not only convenient but also beneficial to all to take advantage of the available resources of the restaurant. For this reason, the project cost management process also became much simpler and easier since labor cost, equipment expenses and other costs were excepted. Besides, some of the ingredients needed for cocktail recipes could also be found in the kitchen of the restaurant. Hence, the organizers were able to save a lot of costs. The table below presents all the expenses which were specifically for the event.

	Product	Cost per item (€)	Quantity	Total cost (€)
Bar equipment	Short glass	€1.48/glass	60	€88.80
	Old fashion glass	€1.99	12	€23.88
Decoration	Light pink silk paper	€1.70/sheet	4	€6.80
	White silk paper	€2.90/sheet	2	€5.80
	Pink crepe paper	€0.95/sheet	3	€2.85
	Dark pink crepe paper	€4.90/sheet	1	€4.90
	Paper yarn	€7.50/roll	1	€7.50
	Card paper	€2.40/bag	1	€2.40
	Glue gun	€7.90	1	€7.90
	Glue stick	€5.50/bag	1	€5.50
	Small lantern	€11.85/bag	1	€11.85
	Big lantern	€3.99	10	€39.90
Printing	Poster	€5.70/ A3	2	€11.40

		€1.20/ A4	6	€7.20
	Questionnaire	€0.80/ A4	6	€4.80
	Service fee	€2.00/time	3	€6.00
Strong alcohol	Kyrö Napue Gin	€39.98	2	€79.96
	Metaxa	€28.10	2	€56.20
	Cointreau	€26.90	2	€53.80
Mild alcohol	Bols strawberry	€13.38	1	€13.38
	Koskenkorva The Original Peach	€15.38	1	€15.38
Syrup	Raspberry syrup	€10.18	1	€10.18
	Green mint syrup	€10.18	1	€10.18
	Pink grapefruit syrup	€10.18	1	€10.18
Juice	Guava juice	€2.95	2	€5.90
	Lychee juice	€2.79	2	€5.58
	Lemon juice	€1.10	4	€4.40
	Orange juice	€2.59	3	€7.77
Others	Frozen raspberry	€1.59	1	€1.59
	Rosemary	€4.25	3	€12.75
	Tonic water	€0.80	7	€5.60
Total		**€530,33**		

Table 2. Costs

Pricing strategy is a significant issue in restaurant operation. If the price is too high, customers may not return to the service. Meanwhile, a price which is charged too low will result in unprofitable business. The company has to give careful consideration to calculating the prices. (Yedlin 2008.)

In fact, average alcohol selling price in Finland is certainly high, around €12.00 per one cocktail (Expatistan 2019). However, after a discussion about the difficulty in upselling alcoholic beverages in Itsudemo, the owner advised to lower the price to €7.00 for one normal size cocktail. The cocktail package including buffet and a set of three small cocktails would cost €24.00 in total. It was indeed €2.00 discount on buffet price when customers purchase the whole package. Both parties had agreed that the main reason for this event is to support the thesis rather than a profitable event.

Table 3 indicates the price calculation for each cocktail. The "Total cost" in Table 3 was not the precise costs of the cocktail since there were some available ingredients from the restaurant kitchen which would be unnecessary to purchase separately. However, the disparities were not significant.

	Product	Cost/volume	Amount per cocktail	Cost per cocktail
Haru no Hana/ Spring Blossom (18cl)	Kyrö Napue Gin	€39.98/0.5l	3cl	€2.40
	Bols Strawberry	€13.38/0.5l	2cl	€0.54
	Raspberry Syrup	€10.18/0.7l	1cl	€0.15
	Guava juice	€2.95/l	6cl	€0.18
	Tonic Water	€0.80/0.25l	6cl	€0.19
	Total cost			**€3.46**
	Selling price			**€7**
	Metaxa	€28.20/0.7l	4cl	€1.61

Haru no Shibafu/ Spring Grass (18cl)	Green Mint Syrup	€10.18/0.7l	1cl	€0.15
	Lychee juice	€2.79/l	6cl	€0.17
	Rosemary	€4.25/kpl	3 sprigs	€0.30
	Total cost			**€2.23**
	Selling price			**€7**
Haru no Hizashi/ Spring Sunshine (18cl)	Cointreau	€26.90/0.5l	3cl	€1.60
	Koskenkorva The Original Peach	€15.38/0.7l	2cl	€0.44
	Pink Grapefruit Syrup	€10.18/0.7l	1cl	€0.15
	Lemon juice	€1.10/0.2l	3cl	€0.17
	Orange juice	€2.59/l	10cl	€0.26
	Total cost			**€2.62**
	Selling price			**€7**

Table 3. Price calculation

4.5 Marketing

4.5.1 Regulation

Due to the involvement of alcohols, the promotion of the cocktails is much more complicated than other products. Marketing content and where to display the materials must be in accordance with Finnish alcohol law and legislation. There are two major restrictions that the organizers took into account when preparing the promotion method. On outdoor advertising, it is not permitted to advertising alcohols in public places like street or bus stops, but only within the licensed premise that serves alcoholic beverages. The second restrictions concerning social media is a ban on certain forms of alcohol marketing involving games, lotteries, contest and use of textual or visual content produced by consumers

intended to be shared by them. (EUCAM 2017.) The organizers, thus, decided on point of sale marketing and social media marketing.

4.5.2 Point of sale marketing

Point of sale marketing refers to all the advertisements displayed in the area that purchase is made. Its purpose is to draw customers' attention to upsell products and increase spend per visit. This method of marketing is frequently used by restaurants and retailers to encourage customers to make more purchases. (Marketing school 2012) Due to the strict legislations of outdoor advertising for alcohol, point of sale marketing is a prudent approach to promote the event.

Since the students also wanted to display a poster on the door as visible for people outside the restaurant, it is essential to use only neutral texture and visual design for the poster. Alcoholic related words like "cocktail" or "alcohols" cannot be presented on the poster. After consulting with tutor teacher who is in charge of marketing and beverage related courses at Saimaa University of Applied Science, the organizers used the word "drink" instead of "cocktail" for The Potential of Sushi and Drink.

The event poster is the main and general one that is displayed on the door, the television of the restaurant as well as other several places inside. Besides, a cocktail menu and other posters with more specific details of the cocktails and their prices are displayed in front of a cash register, on each table and on the restaurant wall. All the marketing materials are designed completely by the students. Owing to the tight schedule, the point of sale promotion started around two weeks before the event; and even later for the social media marketing.

4.5.3 Social media marketing

Social media marketing is described as a form of internet marketing that uses social networks to produce and share contents helping company in attaining their marketing and branding goals (Word Stream n.d.). There are plenty of social media platforms where company can post text, photos, videos and other contents. As the importance of social media in today's society is indisputable, it

is crucial to invest in developing a social media marketing plan to increase customers' engagement.

To work efficiently on social media marketing, Itsudemo hires a PR company for managing their social media accounts, which makes it slightly difficult for the students in announcing the event on Itsudemo Facebook Page. Although the students asked for both Facebook post and event creation on the page, the PR company only created a Facebook event published around 10 PM when the reach and engagement rate are probably at the lowest. However, the students posted on their personal Facebook accounts a few days before the events. The posts later were shared by their friends who are living in Finland in order to help to reach as many people as possible. Extra consideration of presenting the cocktails with the theme of the event was taken into concerning creating photos and other marketing materials.

5   Questionnaire

Regarding the research method, the quantitative method was chosen. The questionnaire was distributed to customers if they purchased the cocktail package. It is essential to keep the question in a favourable length since customers prefer to enjoy their meals rather than answering an extremely long questionnaire. In addition to Finnish people, customers from Vietnam, China, Russia and international tourists make up a third of Itsudemo's total customers. Hence, the questionnaire was in English. Discovering the most suitable cocktail(s) as well as how well they pair with sushi were the main aim of this study.

Firstly, general information about age, nationality, and gender would give the researchers some ideas about customer variety. The first question was to determine whether it was the first-time customer paired sushi with cocktails because this is quite an innovative pairing. Secondly, customers could give their opinions on the flavour enhancement of sushi paired with cocktails by a simple dichotomous question. Moving on from this question, the next one was going to determine specifically which one among the three cocktails was the best match(es) with a rating scale question. With these two questions, the researchers could learn if the sushi and cocktail pairing is feasible.

Subsequently, an open-end question about how the most suitable cocktail(s) affected the customers' flavour experience with sushi would give the researchers knowledge on the impact of the pairing. The questionnaire was wrapped up by asking if the cocktail(s) was worth purchasing again. Discovering the possibility for re-purchasing helps the restaurant when considering having the cocktail(s) in their beverage menu in the future. A version of the questionnaire is attached at the end of the report.

6 Project day

6.1 Cocktail preparing

Normally cocktails are made when ordered. Nevertheless, to prevent inefficiency, the students decided to make all three in advance in large containers. Since most customers would order the cocktail set, plus the bar space is not big enough, it is more convenient to pour ready-made cocktails into serving glasses and finish with garnishing. Additionally, if there were many orders at the same time, the students could not have had enough time to mix all cocktails.

The preparation was done one hour before opening or selling time. Moreover, the proportion of ready-made cocktails are enough to serve around five customers; thus, once it is finished, the students mixed new batches to maintain freshness. The organizers had purchased all alcoholic and non-alcoholic beverages and syrups after the trial. Other ingredients such as fruits and herbs were bought the day before the event. When Itsudemo opened, one student was in charge of selling the cocktails involving cash register and upselling method. The other one was responsible for preparing the beverages and customer service.

6.2 Selling and Serving

Beverage sales are often neglected in most sushi restaurants, even in Itsudemo. Thus, in order to increase sales, products must be presented in an appealing way by a salesperson. A sample of the cocktail package was displayed right in front of the cash register together with the attractive design menu. The student would explain about the event and promote the cocktails for all customers. In the event

days, selling alcoholic beverages was not as easy as the organizers expected. Even though most customers showed interest in the beautiful cocktail samples, soft drinks or safer choices like beer or wine were still their preferences. Therefore, the salesperson tried her best to promote and introduce the limited edition of cocktails to customers; encourage them to try this exclusive pairing in these three days to see how the pairing might increase their appetite.

All customers just ordered the cocktail package instead of a separate cocktail, which was expected. Most customers were excited when being able to try all three different cocktails at the same time and compare them. Drinks are brought to tables together with the questionnaire by the other organizer. The server would explain about the cocktails such as what is included and suggest which cocktail goes better with which type of sushi. If there are any questions, they would be gladly answered. Once clients finished all the cocktails, the students collected the questionnaires and asked for opinions, further suggestions or simple feedbacks about the event in general.

6.3   Three-day event

The event was originally designed to start on Friday as a three-day event. Later it was changed to only two days during the planning process because there is the lunch buffet on Friday, thus making it complicated and confused for pricing. Nevertheless, the students decided to begin selling on Friday evening when Itsudemo normally has the highest beverage sales compared to other days. The students prepared to mix cocktails one hour before the dinner shift started at 4:30 pm. Only in five hours, the students managed to sell around twenty sets of cocktails, which is a quite optimistic result.

Saturday which is the most crowded day in the restaurant was expected to be the best-selling day among three days as. There were numerous reservations for big groups of at least 6 people as usual after the opening. Several customers reserved in advance specifically for the event thanks to social media marketing on Facebook. It was indeed the best-selling day for the cocktails. Around forty sets were sold during the whole event day. Sometimes, the restaurant got really crowded for few hours without an empty seat, follow by a line from the front door

to the cashier. During these specific times, the manager would take over the cash register or help with preparing cocktails to support the students when many cocktail orders were placed simultaneously.

Even in normal circumstances, Sunday was a relatively quiet day for the restaurant business. Less than twenty customers visited the restaurant in the first two hours. Afterward, it was getting busier and more crowded yet the student was able to sell approximately twenty servings only. Besides, the majority of them were to the students' friends. In the end, the organizers failed to meet their targeted sample size of 100 customers. One solution was to prolong the event day, yet one of the students needed to prepare for her internship right after the project, thus it was decided to finish the event on Sunday.

Throughout three days, the students exchanged their tasks as both needed to learn and understand the whole process. At the end of each event day, it was necessary to clean up and check all the ingredients for the next. In case they needed to be refilled, the students could purchase in the next morning before the opening. Regarding the alcohols, nearby Alko stores are closed every Sunday and are open until 6pm on Saturday; therefore, second purchase for alcohol was made on Saturday afternoon.
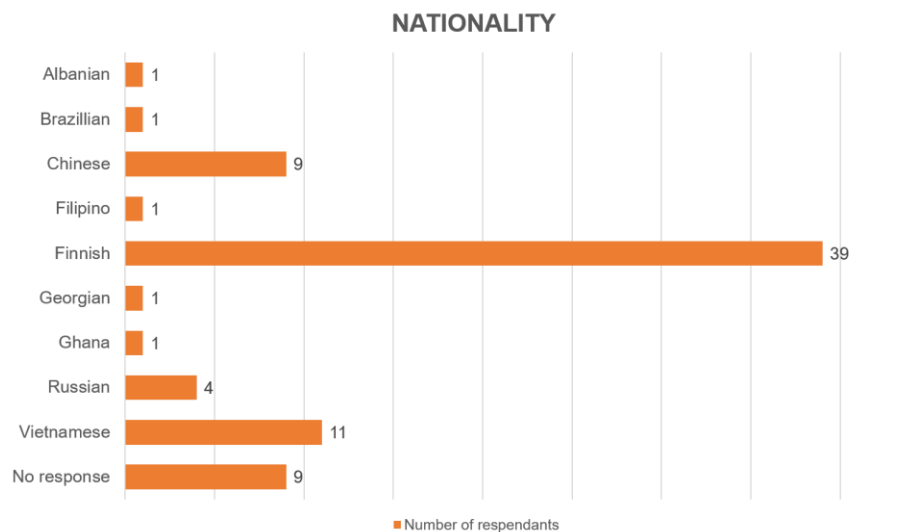
7   Result Analysis

All data collected were documented in Excel for convenient analysis. The study acquired 77 responses as there were 77 cocktail packages sold. With a variety of age groups and nationalities, mostly Finnish, the research is fairly unbiased, yet still relevant to the restaurant's core customers. The first research question of pairing principles for sushi and cocktail was already answered by the aroma method chosen from the beginning. The result of the questionnaire is to specifically determine whether the method works and to evaluate how well the sushi and the cocktail match, as well as its impacts on this project particularly.

7.1 General information

AGE GROUPS

Legend: 20 - 29 ■ 30 - 39 ■ 40 - 49 ■ Over 50 ■ No response
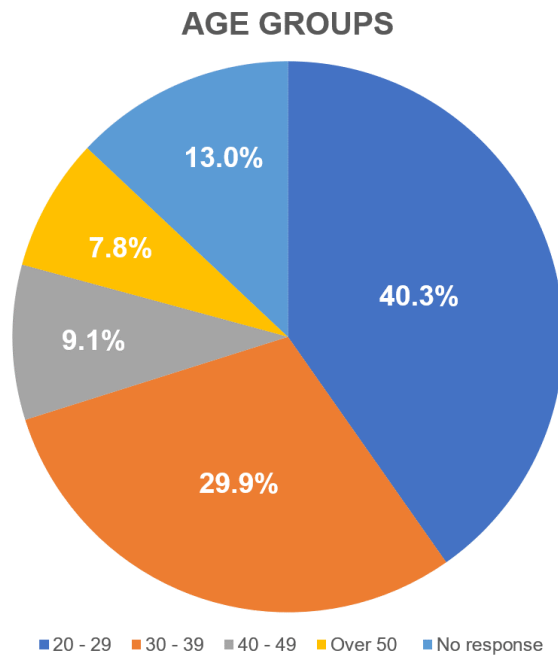
Graph 1. Respondents' age groups

Regarding age group, out of total 77 responses, 13% of respondents left the age field empty. The majority of customers are from 20 to 29 years old with 40.3% of total respondents. In addition, the age group of 30 to 39 is the second largest one with a percentage of nearly 30. Lastly, approximately 17% of respondents are from 40 years old and above. The age data is quite appropriate and reasonable since young people show more interest in this event and tend to experiment innovative products.

NATIONALITY

Nationality	Number of respondants
Albanian	1
Brazillian	1
Chinese	9
Filipino	1
Finnish	39
Georgian	1
Ghana	1
Russian	4
Vietnamese	11
No response	9

Legend: ■ Number of respendants

Graph 2. Respondents' nationality

As expected, Finnish customers made up the major proportion of all respondents with 39 responses obtained. The next largest groups are 11 respondents from Vietnam and 9 from China. Only four Russian customers responded to this field of nationality particularly. The rest are either from different countries or gave no response. The majority of Finnish customers on this event indicates that the concept of pairing sushi and cocktail is fairly possible and appealing for the local market.
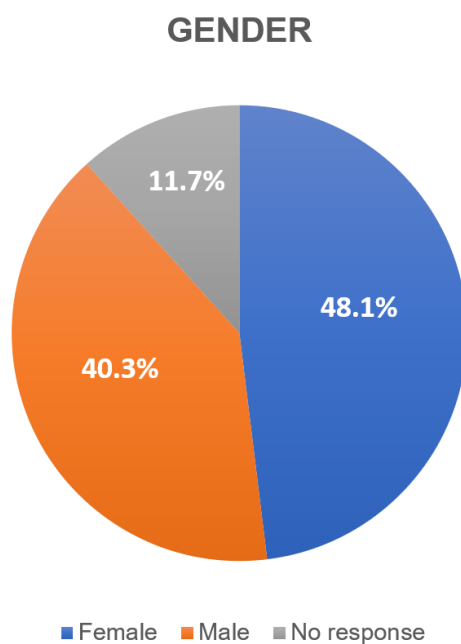
GENDER

Graph 3. Respondents' gender

Based on Graph 3, besides 9 customers leaving blank space for gender part, the percentage of female customers is approximately 8% higher than males' percentage. While selling the cocktail, the students also noticed most men still order beer or wine as their preferences. On the other hand, numerous female customers were attracted by the cocktail samples and decided to try them out. However, the proportions are not remarkably different.

**FIRST-TIME HAVING COCKTAIL
WITH SUSHI**

7.8%   1.3%

90.9%

■ Yes ■ No ■ No response
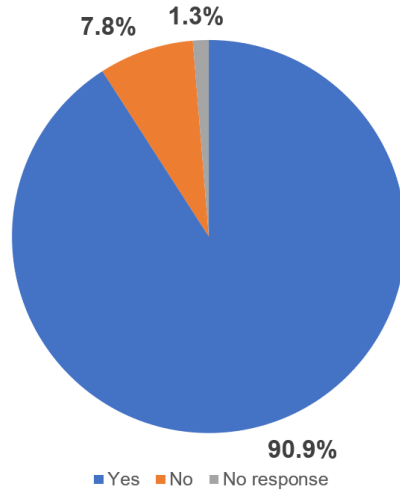
Graph 4. Is this the first-time customers are having cocktail with sushi?

Out of total of 77 customers, 70 stated that it was their first-time trying cocktails with sushi, as can be seen in Graph 4. The researchers were aware that pairing sushi with cocktail is uncommon and quite innovative not only in Finland; hence, the figures prove the same statement.
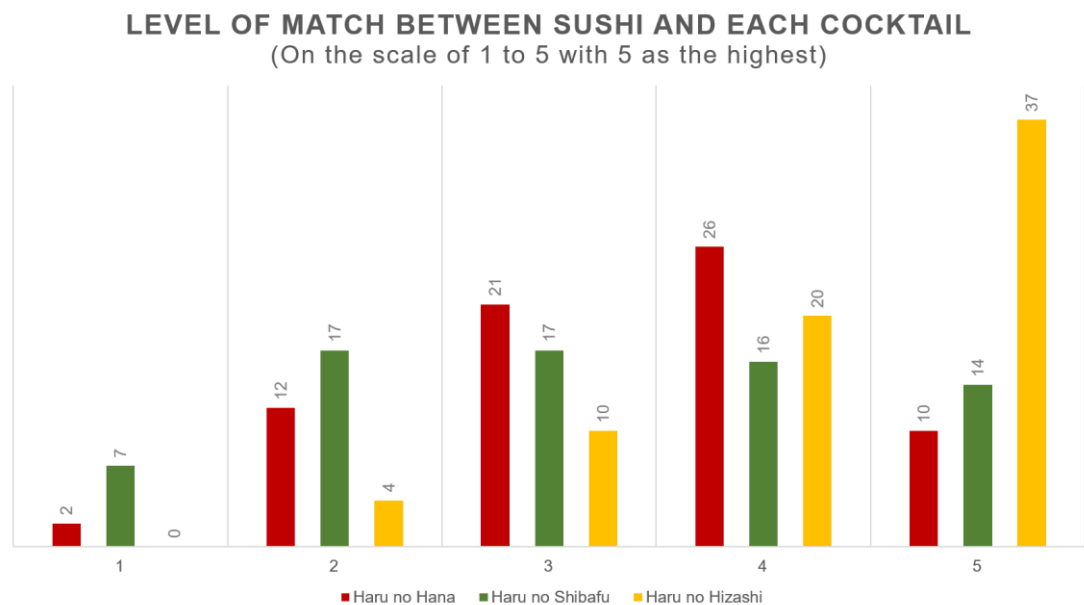
7.2   How well sushi and cocktail match

**ENHANCEMENT OF SUSHI FLAVOR
WHEN SERVED WITH COCKTAILS**
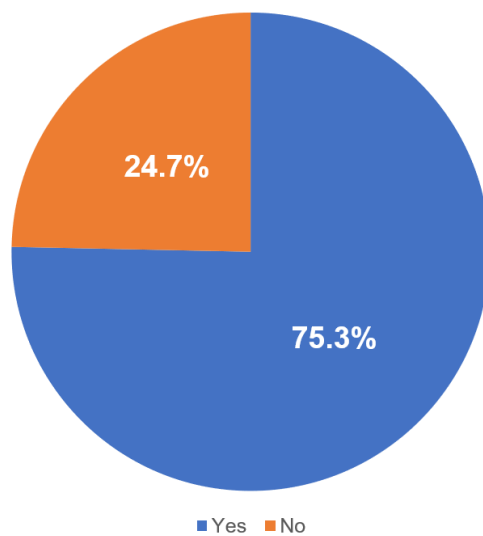
24.7%

75.3%

■ Yes ■ No

Graph 5. Do customers think the flavour of sushi is enhanced when served with cocktails?

49

Overall data concerning the enhancement of sushi flavour when served with cocktails were acquired with around three quarters of total customers agreeing with the statement (Graph 5). The rest believed sushi flavour remain the same whether with or without the cocktail with specific reasons. For instance, seven respondents stated that there is not much different when having sushi and cocktail together or the cocktails taste better on their own. Others would rather have warm drinks or wine with sushi and suggest the cocktail are too sweet and contain too little amount of alcohols. To summarize, the majority of respondents enjoyed the flavour experience while the rest prefer traditional pairing like tea or wine with sushi or do not enjoy the experience as much due to the over sweetness and the lack of alcohol.

LEVEL OF MATCH BETWEEN SUSHI AND EACH COCKTAIL
(On the scale of 1 to 5 with 5 as the highest)

■ Haru no Hana   ■ Haru no Shibafu   ■ Haru no Hizashi

Graph 6. How well did each cocktail match with sushi?

The chart above indicates how well each cocktail matches with sushi flavour specifically on the scale from 1 to 5 with 5 as the highest. The number for each level can be interpreted as follows:

- 1 - not match
- 2 - little match
- 3 - match
- 4 - good match
- 5 - best match

50

Significant differences can be clearly seen on level 1, 2 and level 5. Especially in the highest level of match, the gap between Haru no Hizashi and the other two is noticeable. Furthermore, while Haru no Hana has the majority of votes on levels 3 and 4, Haru no Hizashi presents the least votes for level 3 and increase 10 more votes for level 4. The cocktail with the highest level of match is Haru no Hizashi with 37 votes in contrast to Haru no Hana, which is a significant difference. All three cocktails receive a remarkable higher number of votes from scale 3 to 5 than the other two levels combined. A reason for high match of Hizashi could be the only cocktail to contain significant woody aroma, which is the sole key aroma of seaweed.

7.3 Impact of the pair

Customers were asked to specify how the best cocktails(s) that they chose affect their sushi flavour experience in an open-ended question. Only 50 responses were collected on this question. In general, around 10 respondents enjoyed the flavour experience from all cocktails thanks to their freshness and balance to sushi flavour. The cocktails are believed to provide a refreshing flavour combination and all are different in a good way. Nevertheless, there were six responses claiming the beverages do not affect greatly their flavour experience and are not strong enough in terms of alcohol content. Some also suggested their normal preference for wine, especially white wine. The rest of the responses described particularly their fondness for the flavour of each cocktail combining with sushi.

Firstly, regarding Haru no Hana, "too sweet", "suitable for dessert", "better when drinking alone" and "fresh" are the most common words among the respondents' descriptions. Some customers commented that the cocktail was a good match or even the best match for sushi and they liked its light sweetness and fruity notes from berries. For those who dislike sweet cocktails, Haru no Hana is not a good match with 14 votes for low levels match as can be seen in Graph 6. Additionally, the red cocktail receives the most votes of the level 3 considered as a medium match for sushi because it tastes good, yet not totally goes well with sushi. However, with the highest votes for level 4, Hana is a fairly good match for sushi thanks to its fruity and fresh flavour.

Secondly, Haru no Shibafu matching level does not fluctuate significantly from level 2 to 5 (Graph 6). There is an average of 15 votes for each level except the lowest one. Many respondents thought the flavour is "strange", "a little confusing" or "nothing special" in accordance with the most votes for not match and little match. Nevertheless, there are several responses stating that Shibafu is "fresh", "interesting" and "a good match for sushi", which explains 40% of customers' votes for both levels 4 and 5. One interesting finding about this cocktail is that most votes for best or good match are from male customers.

Going through all the responses for the third cocktail, Haru no Hizashi, the students detect the only positive feedbacks for this cocktail. For example, half of the responses for this question referred to the cocktail flavour as "fresh", "nice", "balance" and "perfect fit". Many customers said this cocktail increased appetite and made them want to eat more. Responses like "slight sourness improves fish flavour", "removes fishy taste" or "makes fish taste better" appeared a few times among all responses for Hizashi. There is also a response such as "fits everything". The statement is basically reasonable since one of the cocktail's key aromas is woody, which is the only key aroma of nori. As stated in the Chapter 3, section 1, any ingredients with woody aroma would have higher chance to match any sushi. Moreover, the majority of favourable feedbacks justify the outstanding high votes for the best match (Graph 6).

7.4   Possibility for re-purchase

POSSIBILITY OF RE-PURCHASE
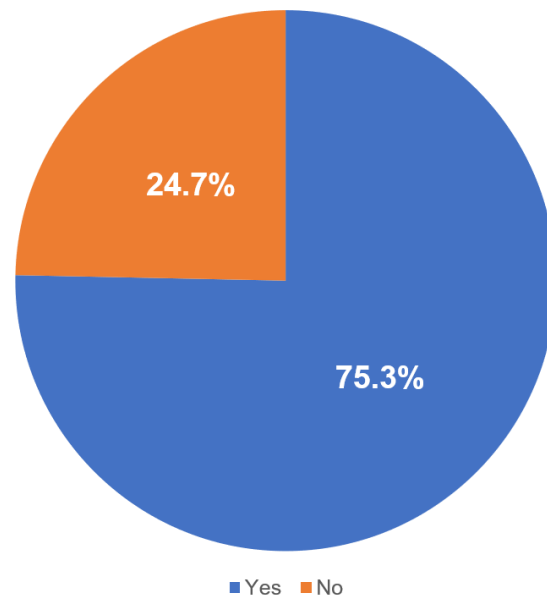
Graph 7. Will customer purchase the cocktail(s) again?

Roughly 75% of respondents decided to order the cocktail(s) again, which correlates to the rate of those agreeing with the enhancement of sushi flavour. In other words, all customers believing the sushi flavour was improved when served with cocktails would be willing to try combination again in the future. This proportion shows a potential possibility for any sushi restaurant, particularly Itsudemo to corporate cocktails into their beverage menu.

In summary, the study indicates the sushi and cocktail combination is innovative as this was the first-time trying the pairing for approximately 90% of respondents. Three-fourths of total respondents thought the sushi taste was better when served with the cocktails. Additionally, out of three cocktails, Haru no Hizashi receives the most positive responses with the highest votes for the best match. Finally, the majority of customers considered to purchase the cocktails with sushi again in the future.

8 Conclusion

Pairing sushi with cocktail is undoubtedly a strange yet innovative concept. The research and project in Itsudemo case show that sushi restaurants have a positive possibility of designing cocktails matching sushi's flavour. By utilizing ingredients' key aromas, a good pair of food and drink, in this case, sushi and cocktail, could be generated. Notwithstanding, when designing cocktails for certain food, a restaurant or bartender must pay great attention to the flavour of cocktails, in order to avoid overpowering the pairing dish. Besides, Foodpairing provides a great application as a starting point for discovering matching ingredients based on similar key aromas which can support restaurants in pairing food and drink. Especially the more key aromas a food and a drink share, the more likely they would match.

The researchers applied Foodpairing's app into the research to create three different potential matching cocktails for Itsudemo's main types of sushi. All three cocktails match with all the selected sushi on a certain level. In general, the majority of customers purchasing the cocktail sets reckoned the enhancement of flavour combination and believed they are worth re-purchasing. However, approximately a quarter of the respondents considered that the cocktails did not improve the flavour of sushi due to over-sweetness or inappropriate ratio. It can be concluded that the pairing somehow worked but might need further adjustment with better ratio of ingredients in the cocktails.

The first cocktail, Haru no Hana with key aromas like floral and green was expected to pair well with the sushi. However, with the excessive use of juice and syrup, the cocktail was a little too sweet and more suitable for dessert according to most customers. If the students had used less juice and no syrup, the cocktail's flavour could have remained balanced, thus, not overwhelming sushi's flavour. Secondly, herbal and spicy cocktail like Haru no Shibafu might be a challenging case. Customers would either totally enjoy it, mostly male customers, or find the flavour fairly confusing and unpleasant. The third cocktail, Haru no Hizashi, which contains citrus, fruity and woody aromas, is certainly the most favourite and suitable cocktail for sushi with the highest votes for good and best match. With appropriate ratio and freshness flavour, this cocktail is considered the perfect fit

for the sushi's flavour. In conclusion, cocktail with citrus, fruity and floral aromas would likely pair well with different types of sushi, especially sushi that contains salmon. The more key aromas food and drink share, the more likely they would match. With this principle, many potential cocktail recipes particularly for sushi or generally any food and drink pair could be generated. Suitable proportions of alcohol content, sweetener ingredients, fruits and herbs also play essential roles in affecting the end flavour of cocktails.

Regarding the impact of cocktail's flavour on sushi, majority of customers commented on cocktails' flavour as freshness and reducing the fishy taste, particularly with Haru no Hizashi. However, more specific impacts were not seen because of the complexity of the question. It is certainly difficult to describe clearly the flavours and how well the pair matches. Thus, if the students had offered multiple choice questions with various impacts instead of an open-ended question, it would have been easier and clearer for customers. In addition, the researchers were struggling with the complication and precision when describing flavour since it could be different experience for each person. In the end, the overall effects of the most suitable cocktail, Haru no Hizashi, when paired with sushi are refreshing, balancing and providing a clean aftertaste. Compared to wine, a cocktail is relatively diverse and creative in terms of ingredients; thus, any restaurant could use this advantage to produce and master authentic flavour experience between food and drink.

9 Evaluation

Generally speaking, the students failed to meet the targeted sample size of 100 customers. However, one of the main aims which is to discover suitable cocktails complementing sushi's flavour is relatively accomplished. There are obviously plenty of room for improvement, but this case could be a starting point for an innovation of beverages to pair with sushi. The other objective was to increase the beverage sales of Itsudemo, which was partly achieved mostly because of the interesting event. Customers were attracted in experimenting new beverages, especially, with a short period of selling. The concept might raise their curiosity in

the beginning, but it is difficult to predict if the cocktails could contribute in increasing beverage sales in a long run.

In terms of research questions, they were mostly answered. The first question about the principles of flavour pairing, the case indicates ingredients consisting similar key aromas would be likely to match. Secondly, based on the aroma method, the students introduced three potential cocktails to pair sushi and cocktail for better flavour experience. The more key aromas the pair shares, the better they would match. Finally, the third question is more challenging and complicated when each person would have different flavour experience. But in general, the cocktails, outstandingly Haru no Hizashi delivers certain freshness, balance and improves flavour of sushi.

Due to the lack of time, the research process and project preparation were completed in one month; thus, the performance was not as good as expected. More research and experiments need to be taken into consideration in order to design more suitable cocktails with appropriate ratio. The study could be more comprehensive and thorough if all sushi ingredients were examined instead of the most used ones. Yet these cocktail recipes, especially Haru no Hizashi are adequately applicable for sushi pairing with some little adjustments. Additionally, the students could have acquired more specific and efficient results if the questionnaire had been designed more carefully. Various essential aspects including age, gender, nationality and suchlike were not elaborated profoundly, which could affect the end results.

The students were able to establish the research and organize the event thanks to the considerable support of the case company - Itsudemo in terms of finance and physical assistance. Although the thesis is not a real success, it is not an entire failure either. The restaurant might not bring the cocktail into their official beverage menu, but it could be an ideal choice for future event or occasion. Further and more comprehensible research about pairing sushi and cocktail could be done with this case as a reliable reference.

Figures

Figure 1. Salmon aroma wheel, p.20.
Figure 2. Salmon match with Gin, p.25.
Figure 3. Salmon match with Cointreau, p.26.
Figure 4. Salmon match with Metaxa, p.26.
Figure 5. Shrimp match with Metaxa, p.27.
Figure 6. Shrimp match with Gin, p.28.
Figure 7. Shrimp match with Cointreau, p.28.
Figure 8. Avocado match with Cointreau, p.29.
Figure 9. Avocado match with Metaxa, p.29.
Figure 10. Avocado match with Gin, p.30.

Tables

Table 1. Ingredients match, p.23 – 24.
Table 2. Costs, p.39.
Table 3. Price calculation, p.40 – 41.

Photos

Photo 1. Cocktails, p.33.
Photo 2. Window decoration, p.35.
Photo 3. Ceiling decoration, p.36.
Photo 4. Handcrafted cherry blossom tree, p.37.

Graphs

Graph 1. Respondents' age groups, p.47.
Graph 2. Respondents' nationality, p.47.
Graph 3. Respondents' gender, p. 48.
Graph 4. Is this the first-time customers are having cocktail with sushi?, p.49.
Graph 5. Do customers think the flavour of sushi is enhanced when served with cocktails?, p. 49.
Graph 6. How well did each cocktail match with sushi?, p.50.
Graph 7. Will customer purchase the cocktail(s) again?, p.53.

List of references

Adelstein, J. 2017. Forbes. The Japanese food boom shows no sign of slowing down. https://www.forbes.com/sites/adelsteinjake/2017/10/02/the-japanese-food-boom-shows-no-sign-of-slowing-down/. Accessed on 21 December 2018.

Alko n.d.a. Kyrö Napue Gin. https://www.alko.fi/tuotteet/112536/Kyr-Napue-Gin. Accessed on 10 January 2019.

Alko n.d.b. Metaxa ****. https://www.alko.fi/tuotteet/001176/Metaxa-. Accessed on 10 January 2019.

Alko n.d.c. Cointreau. https://www.alko.fi/en/products/159221/Cointreau. Accessed on 10 January 2019.

Alko n.d.d. Koskenkorva The Original Peach Plastic Bottle. https://www.alko.fi/tuotteet/287437/Koskenkorva-The-Original-Peach-muovipullo. Accessed on 10 January 2019.

Alko. Wikipedia. https://en.wikipedia.org/wiki/Alko. Accessed on 10 January 2019.

All about Sushi Guide. n.d. Types of Sushi | Learn about all of the different Sushi types. https://www.allaboutsushiguide.com/types-of-sushi.html. Accessed on 5 January.

Archibald, A. n.d. What to Drink with Sushi (Hint: It's Not Sake). Supercall. https://www.supercall.com/culture/sushi-and-cocktails-pairings. Accessed on 2 January 2019.

Beckett, F. 2019. Matching Food and Wine. Top Pairing: Eight great drink pairing for sushi. https://www.matchingfoodandwine.com/news/pairings/eight-great-drink-pairings-for-sushi/. Accessed on 6 January.

Bridges, J. 2018. Project Manager. The Basics of Project Costs Management. https://www.projectmanager.com/training/basics-project-cost-management. Accessed on 18 January.

Chartier, F. 2012. Taste Buds and Molecules: The Art and Science of Food, Wine, and Flavour. New Jersey: John Wiley & Sons Inc.

David. 2012. Make cocktails at home: Learning Mixology - in your own home. Mixing cocktails 101 – The methods – Overview. http://makecocktailsathome.com/mixing-cocktails-101-the-methods-overview/. Accessed on 6 January.

Dornenburg, A. & Page, K. 2009. What to drink with What you eat (E-book). New York: Hachette Book Group.

Dowd, M. n.d. Advantages & Disadvantages of Qualitative & Quantitative Research. The Classroom. https://www.theclassroom.com/advantages-disadvantages-of-qualitative-quantitative-research-12082716.html. Accessed on 24 December 2018.

Doxat, J. 1966. Booth's Handbook of Cocktails and Mixed Drinks. London: Pan Book Ltd.

Drinks Mixer n.d. Basic Techniques. http://www.drinksmixer.com/guide/1-4.php. Accessed on 5 January 2019.

Ellis, G. 2012. The Australian Bar Attendant's Handbook. Fifth edition. Pearson Australia.

EUCAM 2017. Regulation on Alcohol Marketing. Finland. https://www.foodnewsfeed.com/fsr/spirits/pairing-cocktails-food-everything-you-need-know. Accessed on 12 January 2019.

Expatistan. 2019.Cost of living in Finland. https://www.expatistan.com/cost-of-living/country/finland. Accessed on 21 January 2019

Foodpairing. Science Behind. https://www.foodpairing.com/en/science-behind. Accessed on 22 December 2018.

Gibson, M. 2018. Food Science and the Culinary Arts. London: Elsevier Inc, Academic Press.

Graham, C. 2019. What is a cocktail?. The Spruce eats. https://www.thespruceeats.com/what-is-a-cocktail-760163. Accessed on 2 January 2019.

Gurunavi. 2017. Types of Sushi: A Complete List From Nigiri to Narezushi. https://gurunavi.com/en/japanfoodie/2017/05/types-of-sushi.html?__ngt__=TT0f3a9deda008ac1e4ae729GBnJstdoGBS71i4xIIhAtp. Accessed on 3 January 2019.

Heagney, J. 2012. Fundamentals of Project Management. Fourth edition. New York: American Management Association.

Helsinki Times. 2018. Sushi for the whole family. http://www.helsinkitimes.fi/eat-and-drink/15334-sushi-for-the-whole-family.html. Accessed on 21 December 2018.

Itsudemo. 2018. https://itsudemo.fi/helsinki/. Accessed on 27 December 2018.

Marketing school. 2012. Point-of-Sale Marketing. http://www.marketing-schools.org/types-of-marketing/point-of-sale-marketing.html. Accessed on 22 January 2019.

Molecular Gastronomy. n.d. Molecular Mixology.
https://www.moleculargastronomy.com/molecular-mixology.html. Accessed on 4
January 2019.

Mouritsen, O. 2009. Sushi: food for the eye, the body & the soul. Springer
Science+Business Media B.V.

Mykkanen, J. 2018. Handbook for rules on service of alcohol 2018.
https://perho.fi/wp-content/uploads/2018/03/Handbook-for-rules-on-service-of-
alcohol-2018_.pdf. Accessed on 10 January 2019.

Namisato, D. 2011. Meaning of the origami crane.
https://www.jccc.on.ca/origami-cranes/pdf/meaning_of_the_origami_crane.pdf.
Accessed on 20 January 2019.

Oxford Dictionary. Cocktail. https://en.oxforddictionaries.com/definition/cocktail.
Accessed on 2 January 2019.

Parker, J. K., Elmore, J. S. & Methven, L. 2015. Flavour Development, Analysis
and Perception in Food and Beverages. Cambridge: Woodhead Publishing.

PMI. Project Management Institute. What is Project Management?.
https://www.pmi.org/about/learn-about-pmi/what-is-project-management.
Accessed on 7 January 2019.

Puckette, M. 2014. The Real Difference Between Flavour vs Taste. Wine Folly.
https://winefolly.com/tutorial/taste-vs-flavour-vs-aroma/. Accessed on 26
December 2018.

Shepherd, G. 2012. Neurogastronomy: How the Brain Creates Flavour and Why
It Matters. New York: Columbia University Press.

Shinto Restaurants 2015. Beginner's guide to Sushi & Drink Pairings.
https://shintorestaurants.com/beginners-guide-sushi-drink-pairings/. Accessed
on 6 January 2019.

Sushi Faq n.d. The History of Sushi. https://www.sushifaq.com/basic-sushi-
experience-information/the-history-of-sushi/. Accessed on 2 January 2019.

Swartz, K. 2019. Beverage Dynamics. How to pair sushi and cocktails.
https://beveragedynamics.com/2019/01/04/how-to-pair-sushi-and-cocktails/.
Accessed on 6 January 2019.

Sweet cocktails. n.d. How to prepare a cocktail.
http://sweetcocktails.com/en/cocktails/how-to-prepare-a-cocktail.html. Accessed
on 4 January 2019.

Takeda, E. 2014. Significance of Sakura: Cherry Blossom Traditions in Japan.
Festival Blog. Smithsonian Institution.

https://festival.si.edu/blog/2014/significance-of-sakura-cherry-blossom-traditions-in-japan/. Accessed on 20 January 2019.

Tsukiji cooking. 2018. What is washoku. http://tsukiji-cooking.com/whatswashoku/. Accessed on 21 December 2018.

University of Bristol. 2008. Gas Chromatography Mass Spectrometry (GC/MS). http://www.bris.ac.uk/nerclsmsf/techniques/gcms.html. Accessed on 23 December 2018.

Vaughanbell. 2016. Two smell systems in the human brain. Mind Hacks. https://mindhacks.com/2006/11/16/two-smell-systems-in-the-human-brain/. Accessed on 26 December 2018.

Watson, E. 2013. The science behind food pairing: Why do pineapple and blue cheese taste so great together? Food navigator-usa. https://www.foodnavigator-usa.com/Article/2013/03/12/The-science-behind-food-pairing-Why-pineapple-blue-cheese-match. Accessed on 24 December 2018.

Word Stream. n.d. Word Stream: Online Advertising Made Easy. Social Media Marketing for Businesses. https://www.wordstream.com/social-media-marketing. Accessed on 25 January 2019.

Wolf, B. 2018. Pairing Cocktails with Food: Everything You Need to Know. Food Newsfeed.https://www.foodnewsfeed.com/fsr/spirits/pairing-cocktails-food-everything-you-need-know. Accessed on 23 December 2018.

Yedlin, J. 2008. Beverage operations pricing strategies. University of Nevada, Las Vegas. Master of Hospitality Administration. https://core.ac.uk/download/pdf/62868034.pdf. Accessed on 22 January 2019.

Appendices

Appendix 1. Cocktail menu

SPRING COCKTAIL MENU

HARU NO HANA/ SPRING BLOSSOM

3cl Kyrö Napue Gin
2cl Bols Strawberry
Raspberry Syrup
Guava Juice
Tonic Water
Raspberry Smashed   €7.00

HARU NO SHIBAFU/ SPRING GRASS

4cl Metaxa
Green Mint Syrup
Cucumber & Rosemary Juice
Lychee Juice   €7.00

HARU NO HIZASHI/ SPRING SUNSHINE

3cl Cointreau
2cl Koskenkorva The Original Peach
Pink Grapefruit Syrup
Lemon Juice
Orange Juice
Peach Smashed   €7.00

You can order one big cocktail (18cl per glass) of your choice
or a set of 3 small cocktails (6cl per glass) for **€7.00.**
Cocktail package include a set of 3 small cocktails & one buffet sushi for **€24.00.**

Appendix 2. Main poster

Appendix 3. Detailed poster

Only on 26th & 27th January

HARU NO HANA

HARU NO SHIBAFU

HARU NO HIZASHI

A SET OF
3 DIFFERENT COCKTAILS
(6cl per glass)
& SUSHI BUFFET

€24.00
norm. €26.00

You will receive a short questionnaire when purchasing the set for the purpose of finding the best pairing of sushi and cocktail.

OR
A BIG COCKTAIL
OF YOUR CHOICE
(18cl per glass)

€7.00

Appendix 4. Questionnaire

SUSHI & COCKTAIL PAIRING SURVEY

Age: Nationality: Gender:

1. Is this your first time having sushi with cocktail?

    Yes   No

2. Do you think the flavor of sushi is enhanced when being served with cocktails?

    Yes   No

If yes, please answer the question 3 and 4 below
If no, please explain, then move on to question 5

3. On the scale from 1 to 5 (with 5 as the highest), how well do the sushi and cocktails match?

Haru no Hana	🔴	1	2	3	4	5
Haru no Shibafu	🟢	1	2	3	4	5
Haru no Hizashi	🟡	1	2	3	4	5

4. How does the best cocktail(s) (highest point on the table above) affect your sushi flavor experience?

_____

_____

_____

5. Would you purchase the cocktail(s) again?

    Yes   No