

FEASIBILITY OF NORTHERN LIGHTS FLIGHTS

Case: Sodankylä

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The thesis studies the feasibility of arranging Northern Lights flights departing from Sodankylä. Thesis finds out amount of the existing activities and it states what kind of requirements must be fulfilled to enable this kind of activity in Sodankylä airport. Commissioner Sodankylä Airport Technical Service Oy (ATS) was established in 2019 with the aims to develop and maintain prerequisites of flying and arranging also commercial flights at Sodankylä airport.

Qualitative search methodology is used, and a content analysis utilised in finding out implementations of this activity in the Northern countries. Information was gathered from the internet and a theme interview with an entrepreneur. Information of duration, services, price, and types of the planes were searched to detect the nature of the products. Feasibility is studied as a possibility to the commissioner to sell the services in the airport when the needs for users are discovered.

Theory part discusses Northern Lights tourism in the arctic area and how it is implemented. Experience design plays important role and principles of the experience are presented as well as sustainability and responsibility that needs to be considered.

The results show that there are possibilities for arranging flights from Sodankylä, but it will require sufficient maintenance of the aviation areas and building a shelter. Operating the flights will be the most expensive part and co-operation with other providers and competitors plays very important role to enable profitable business.

Local companies as partners will provide knowledge and products that need special skills. Customer experience needs to be created properly to achieve demand even from other regions than municipality of Sodankylä. Arranging these flights will benefit municipality as well as local entrepreneurs because there are not any tourism activities available now in centre of municipality.

Key words Northern Lights, flight tourism, feasibility, Sodankylä, experience, qualitative research

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SYMBOLS AND ABBREVIATIONS

AGA	Aerodromes and Ground Aid
AIP	Aeronautical Information Publication
AIR	Airworthiness
ANS	Air Navigation Services
AOC	Air Operator Certificate
ATS	Sodankylä Airport Technical Service Oy
B2B	Business to Business
B2C	Business to Consumers
CORCIA	Carbon Offsetting and Reduction Scheme for International Aviation
DMC	Destination Management Company
EASA	European Union Aviation Safety Agency
EGNOS	European Geostationary Navigation Overlay Service
ETS	Emissions Trading System
GEN	General
NOTAM	A notice distributed by means of telecommunication containing information concerning the establishment, condition or change in any aeronautical facility, service, procedure or hazard, the timely knowledge of which is essential to personnel concerned with flight operations
OPS	Operations
PEL	Personnel Licencing
RNP	Required Navigation Performance
SEC	Security
SGO	Sodankylä Geophysical Observatory
SWOT	Strengths, Weaknesses, Opportunities, Threats
TGR	Training
UNWTO	World Tourism Organization

1 INTRODUCTION

Northern Lights seem to be drawing tourists into Lapland. Vilar (2020) highlights that number of internet searches in 2019 with a name Northern Lights has almost doubled compared to previous year. According to Visit Finland survey 59% of visitors have informed Nature, including Northern Lights, as a main reason for travelling to Finland (Business Finland 2018a). Packages and services are created around those and safari providers offer at least one product concerning Aurora hunting. A major problem is caused by the weather because clouds will prevent visibility to the sky. Probability for appearance of Northern lights is around 50% in Lapland and already at Kilpisjärvi level it grows to 75% of the nights (Finnish meteorological Institute 2020a).

This study discovers how much Northern Lights flights are offered in the Nordic countries. Another research question will detect the feasibility offering the Northern Lights flights starting from Sodankylä. Limitations and regulations from Finnish authorities might influence possibility to provide this service. Requirements for Sodankylä Airport and municipality for providing facilities for this activity are also considered.

Commissioner Sodankylä Airport Technical Service Oy (ATS) is a fresh company, established 2019. The company's business idea is to be a non-profitable actor at Sodankylä Airport and provide facilities to B2B and B2C customers. The company wants to develop conditions and the use of airport area owned by Sodankylä municipality. The commissioner's interest in this study is to find prerequisites of the airport needed for providing commercial flights. The company is building technology that enables flight operations at night-time and approaching through the clouds without air traffic control. (Korvanen 2020.)

In this study the theory of experience introduced by Pine and Gilmore (1999; 2011) and Schulze (2013) are applied in creating the product. In tracing feasibility, the list of affecting issues is based on laws and regulations as well as needs of the possible entrepreneur and flight operator. Qualitative research methodology is in use and content analysis guides in managing the information that is found in internet and with an interview of the Finnish entrepreneur.

The topic interests me because I fly for a hobby and agree with Pitkämäki (2020) that we should create better flying culture in Finland. Training for the pilot is quite comprehensive and a private pilot must know the rules in aviation as well as commercial pilots who receive even more extensive training. From private pilot the journey is still long for executing commercial flights and maybe I will not be flying myself, but I am interested in arranging commercial flights in Sodankylä. Sodankylä is my home airfield and I am involved in executive committee of local aviation club, so I am familiar with the prevailing situation and conditions.

Result of this research presents a list of considerable parts when starting the flight business. Features affecting in creating Northern Lights flights as a product are sought out and a list of the possible co-operative partners shows that this activity would benefit many companies in the area. Even if there are still emissions from flying it will in the other hand protect nature from wearing out. Flight business just needs sustainable and profitable concept to enable executing.

Northern Lights flight provider could be an important customer to ATS, and this kind of flights will benefit whole municipality and other companies in the area. Results of this study might have impact on flight tourism in Finland and all tourism in Sodankylä in future.

2 TOURISM CONCEPTS

2.1 Northern Lights Tourism

Northern Lights are surrounded by the myths and stories which depend on the country and region where they are told. All the stories can be found in internet and for example Go Finland webpage has explanations related to a fox and birds or even a whale (Go Finland 2020). Of course, there exists a scientific explanation and the reason for Northern Lights, which are also called Auroras, and it is related to the Sun. The Sun emanates charged particles to its surroundings, and this is called solar wind. When the solar wind bursts, it sends particles towards the Earth and after one or two days those reach magnetic field of the Earth. Magnetic field normally reflects the particles back to the space, but near polar there are holes that let particles through and when reaching atmosphere of the Earth, the reaction with the air creates the phenomena called Northern Lights. Geomagnetic disturbances can be measured, and it is used to predict appearance of the Northern Lights. There are still some uncertainties concerning the fact when the phenomena occur and that is why the range of different ways of predicting is still quite high and the forecast can be created for only short period (Finnish Meteorological Institute 2020b.) Figure 1 presents one webpage (Jemma Mobi 2020) as an example where is gathered several different gauges used in forecasting and it shows complexity of the task. Kp-index is one number used for predicting and with scale one to nine, value five or more means a higher probability to see the Northern Lights (NOAA 2020).



Figure 1. Example of Challenge in Forecasting Auroras (Jemma Mobi 2020)

Touristic demand in digital channels were 5,1 million searches in 2019 concerning Finland. Brand tags northern lights, sauna and igloos are growing fastest compared to previous year. Northern lights searches were 49.1% bigger than in year 2018 and growth was bigger than in other northern countries. (Vilar 2020.)

Tourists come to Finland in addition to neighbouring countries mostly from China, Germany, and United Kingdom. Even 59% of the visitors mentioned main reason for the visit in Finland being Nature and that category involves Northern Lights. In study within Lapland region the Northern Lights were one of the first ones popping into a mind when asked about Lapland. (Business Finland 2020a.)

Northern Lights tourism was studied during the years 2004 – 2014 in northern Norway to determine how tour operators and destination management organisations promote the elements of uncertainty. Involvement and actions of the guide are noticed to play important role in defeating uncertainty and disappointment. Guide is mentioned to be an expert as well as able to find Northern Lights if there are any. In the study also mobility and weather are found to be important, because if they can travel the chance to see Northern Lights despite of the clouds grows remarkably. At the same time mobility turns character of the activity from watching to a hunt. Science has been in important role, because it brings opportunity to forecast the phenomena and involve the tourists in creating an experience. Uncertainty can be interpreted also as authenticity and can increase desirability of the product (Wang 1999 as cited in Heimtun & Lovelock 2017). A link between risk and authenticity of the tourism product increases excitement and visitor satisfaction. Heimtun & Lovelock have cited Hintch & Higham (2001) with a sport tourism and Knight (2009) with wildlife watching when comparing these to chasing Northern Lights as a product with features of uncertainty. All these products are highlighting the other elements of the experience to contribute visitor satisfaction in case the absence of a sighting. (Heimtun & Lovelock 2017.)

Heimtun, Jóhannesson and Tuulentie studied Northern Light tourism in Iceland, Norway, and Finland in 2014, when the interest has already risen. They point out that a guide plays important role in Northern Lights activities, especially when there is nothing to see in the sky. Also taking care of tourists by offering snacks

and telling interesting stories will keep the customers satisfied. Aurora hunting combined with snowmobiling will bring happier customers than bus tour, even if there are no auroras because of other activity the customer has him or herself. In the study they found every guide thinking that this kind of the tourism will have a future. Wider knowledge concerning astronomy might be interesting and enhancing Northern Lights tourism. (Heimtun et al. 2014.)

Huusko (2018) has in his thesis studied Northern Lights tourism in Lapland and how to form it into desired product. Many tourists are interested in snow and nature as well as the traditional Lappish activities like snowmobiling and the husky rides and those are combined to the Aurora hunting as a package to fulfil several desires at the same time. For the Asian tourists Northern Lights are more and more a main reason to come to the northern countries. The packages created around Northern Lights will bring an extra value and experience compared to just watching them through a window or at a parking place. Northern lights do not appear every night nor be visible all night and there are clouds in many evenings preventing the visibility. In program planning needs to be considered the no show of Auroras. Stories and beliefs related to Northern Lights also fascinate especially Asian travellers. (Huusko 2018.)

Kivelä (2014) finds Northern Lights to be the core of the experience in her thesis. With name "hunting" customers are prepared for the concept of uncertainty in seeing those and maybe uncomfortable conditions during the trip. Northern Lights are natural phenomena that can be somehow predicted, but appearance may still vary despite of those. To create the Northern Lights hunt a tempting experience, it needs hospitality, storytelling, and different facilities in addition to some activity besides watching into the sky. Tourists are more and more interested in experiences that are built around Auroras to have good time even if there is a no show of Northern Lights. Tourist might also want to participate another trip even if have seen Northern Lights in the first one. Motive can be Auroras that have been visible and want to see those again or the supporting experience that exists. (Kivelä 2014.)

Partanen (2013) in her thesis develops a tourism product called Northern Lights Evening. As a result, the product turned out to be unfeasible, because it

depended too much on Northern Lights. Test customers proved that it should be more cooperation or coproduction to mould the product interesting. Having only a presentation with snacks was not enough to call it an experience. Only activity for tourists was a walk into a laavu and back hoping that there were Northern Lights visible. (Partanen 2013.) This confirms the idea that all the elements of experience need to be present to have a good product and role of the guide is important.

In the handout survey, executed by Ylimartimo & Manninen (2018, 54) the highest affecting category when choosing the destination was nature experience. The Survey showed that the category with highest average affecting destination choice was Nature Experience and authentic nature of Lapland. Ylimartimo & Manninen (2018) have reached same conclusion as Decrop (2006) that the price level is most often considered as accommodation and transportations to destination and in packages it is leading criteria but the price of food or activities that are available do not affect destination choice. (Decrop 2006, 99). Within the nature experience category phenomena in nature, like Northern Lights were most affecting and secondly the arctic nature and landscape for choosing the destination. (Ylimartimo & Manninen 2018, 54-56)

2.2 Creating Experiences

Many theories explain experiences. Best known is the four realms of experience (figure 2) presented by Pine & Gilmore already in the 90s. To have a real experience the occasion must have some educational parts as well as escapist ones to keep customers interested. With esthetics it will be made enjoyable and there must be something entertaining to finalize the experience. Two dimensions can also be found in the model. There are passive and active participation of the customer against absorption and immersion as other dimension. When all the realms are acknowledged the experience has achieved a sweet spot in the middle, which means best possible meaningful experience for the customer. (Pine & Gilmore 1999.)

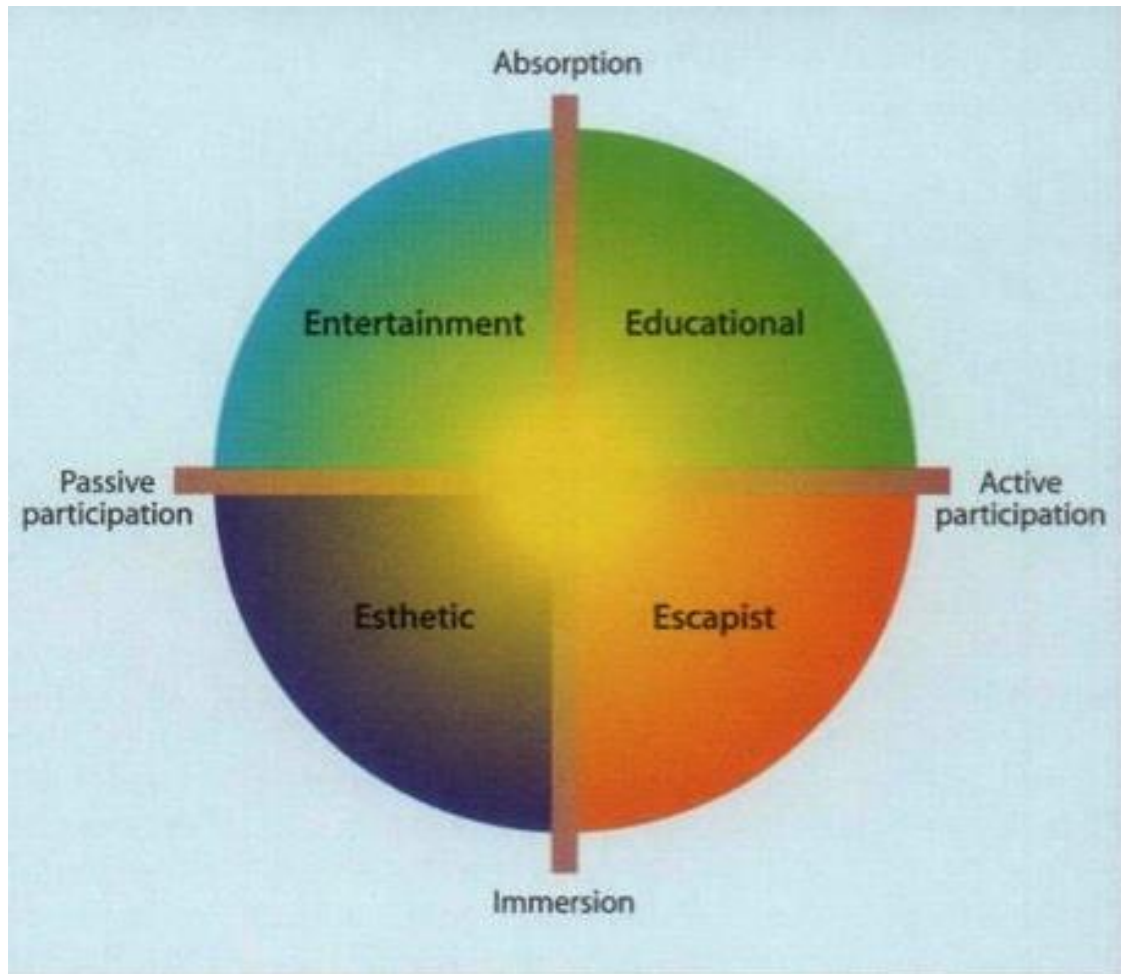


Figure 2. Four Realms of Experience (Pine & Gilmore 1999)

Pine & Gilmore (2011) have also defined different levels in the journey to experience through customization to create value to the product (Figure 3). On market there might be many products competing with a same basic product. This model is applied to the case Starbucks where the basic product is a coffee bean, but when ground and served in certain way in certain environment it will in the end be a concept that is unique and worth of every penny for the customer. (Pine & Gilmore 2011.)

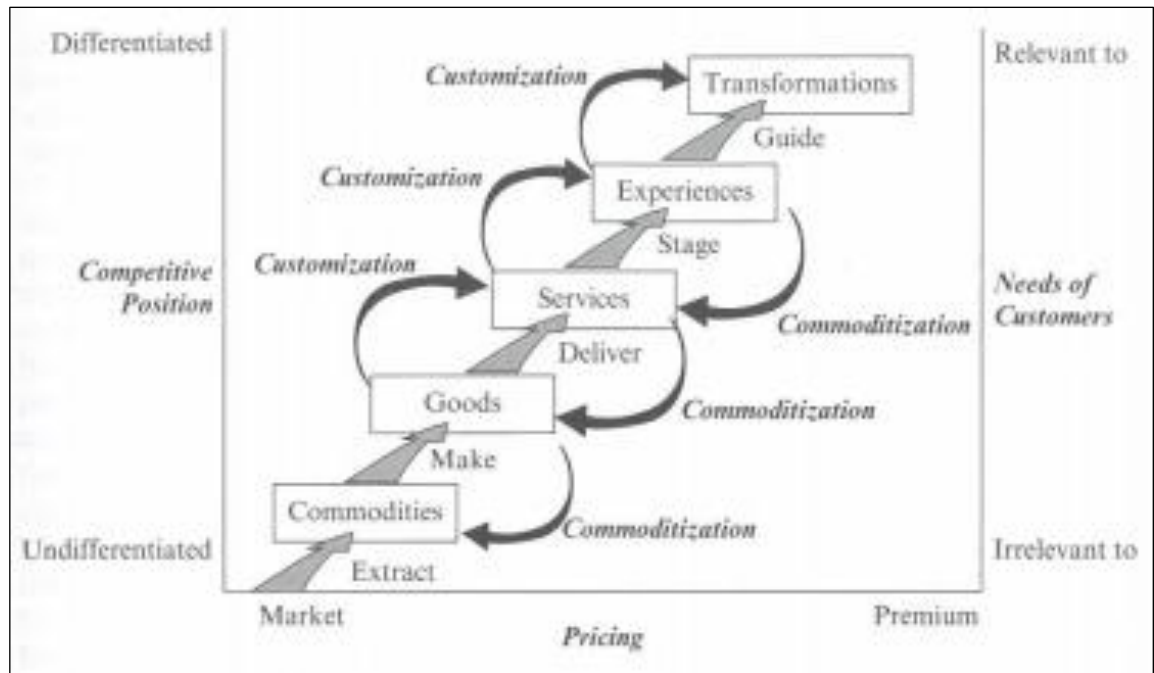


Figure 3. Progression of Economic Value (Pine & Gilmore 2011, 245)

Schulze presents four strategies for experience supply: schematization, profiling, modification, and suggestion. Instead of a new product, modification of the old would form it more desirable and if it is already good enough, the idea of the better product will increase desirability of the product. Schulze uses loudspeakers as an example; when it will be so loud that anyone can even bear to hear it, it is still more wanted than the old model. Suggestion will create certain types of beliefs and expectations. If the consumer considers product as a new, it will be new. When image is created to combine the product to certain atmosphere or surrounding, the experience will satisfy needs of certain customers and a goal has been achieved. Schematization brings kind of classification to the product and attracts customers who are interested in that kind of experiences when profiling in the other hand brings wanted differentiation even if the product itself will not change. (Schulze 2013.)

2.3 Sustainability and Responsibility

A sustainable tourism needs planning and management to create the products that consider interests of all stakeholders. To create a sustainable and profitable business, benefits need to be spread to the other stakeholders too. When a balance between community, industry, environment, and the visitor will be

reached, the product should be ready. Environmental issues are highly respected, and they need to be a part of planning. Sustainable use of natural sources and biodiversity as well as reducing impacts on nature are the key elements to responsibility. (UNWTO 2007.)

It is good to have a local community involved already at planning to enable a cultural and social co-operation and maximum benefits to all the stakeholders. A good network and fair prices offer better opportunities to all the tourism industry stakeholders at the destination. Realistic objectives, work with the local people and a government as well as a responsible tourism and showing the progress help in creating a sustainable and responsible activity. Tools are helpful in measuring the success in this area and some companies use the outside accreditation and certification in proving their actions. UNWTO has published The Guidebook on Indicators of Sustainable Development for Tourism Destinations (UNWTO 2004) to help indicating and measuring sustainability. (UNWTO 2007.)

Business Finland has gathered publications of Visit Finland together concerning sustainability and responsibility. There is available for example Tools for Sustainability and Communication that helps evaluating, setting the goals, and gaining a commitment, as well as creating a marketing plan for the sustainable actions. In the tool can be found environmental, economic, socio-cultural, ethical and safety aspects to sustainability. (Business Finland 2020a.)

A Sustainable Travel Finland label has been launched in June 2020 and it proves that a company or a destination acknowledges sustainability in their actions. Sustainable Travel Finland programme utilises international concepts but takes the national and regional conditions and needs into account. When accepted to the program there is an access to a platform that guides the company through the program. The seven steps lead from a commitment through developing and certification to a continuous development of sustainability. The label is granted subsequent to passing the qualification and receiving certification. (Business Finland 2020b.)

3 THESIS PROCESS AND QUALITATIVE METHODOLOGY

3.1 Qualitative Research

A case study as method goes beyond the quantitative statistical results and can be executed for example in a certain geographical area or limited number of participants. It allows using both the quantitative and the qualitative methods in research. It has connection to real-life environment because it can be defined according to the needs. The method is however criticized because direction of the findings can be influenced, and it has no basis and inability to the scientific generalised results. (Zaidah 2007; Dudovskiy 2020.)

A qualitative research has been chosen as a methodology because this is a narrow field of products involved. There is not actual knowledge beforehand how these flights are implemented and who is operating those or are they even successful. It is not possible to find the customers either which would have made quantitative method possible.

A qualitative content analysis is good tool when there is a need to find the underlying meanings or create an inductive analysis based on the chosen themes and topics. The result can be a description or a typology and pay attention to the unique themes. (Zhang & Wildemuth 2005.) Taylor-Powell and Renner (2003) have listed the steps for analysing content in a qualitative research. Analysing the data needs knowledge of the quality and the validity of the data in addition to limitations and level of existing information. Subsequent to evaluation, the focus needs to be on analysis, what are the key questions, are they answered and what approach to use. Information needs categorising and finding enough categories to arrange to suitable parts. The next step consists of identifying the patterns and the connections between categories as well as the differences and the similarities and those are often presented in tables to have a better view. The result explains the findings and the interpretations as well as the importance and the meaning of those. The limitations are important information to the readers to understand the perspective and know what is left out and for what reason or if something was not found at all. (Taylor-Powell & Renner 2003.)

In this case it is possible to find features of the product in internet, but not information of how it is implemented. To benefit from the information in creating a business, the reality and the backstage activities must be found behind the marketing actions. The content analysis gathers information of the service providers and what they offer. The similarities were compared, and the differences noticed during the search. Analysis is based on the material found on internet and tells also about the created pre-experience of the products.

A theme interview was chosen as a research method because there was no previous knowledge concerning this action and the goal was to find all available information. In theme interview is possible that the questions lead to somewhere totally different that was expected. The questions (Appendix) try to cover all the possible aspects that could be appearing during the interview. Themes were quite common: the business idea, the product, customers, competitors, co-operation, and future of the Northern Lights flights. Interview was conducted in Finnish language because of an assumption that there is more information available when interviewee can use native language. Quotations that are used in this paper I have translated to English. Themes of the interview were sent beforehand, and the interview was executed in September in Rovaniemi.

3.2 Feasibility Study

The word feasibility means the degree or state of being easily, conveniently, or reasonably done (Oxford Dictionary 2020). A feasibility study is sometimes mixed with a business plan, but it will be utilized subsequent to the business idea and the plan are created. A feasibility study finds out whether the concept is possible to implement technically and financially. The feasibility study will be worth of money especially when a project needs a great amount of investments. (Market Business News 2020.)

The feasibility study is an important analysis that considers the relevant economical, technical, and legal aspects. It can reveal the problems that might appear concerning for example a schedule or funding or even if the direction of business is right one. The feasibility study provides information in addition to the

owners to the investors and the other stakeholders and as its best offers a base for a marketing strategy. (Investopedia 2020.)

This study gathers and evaluates the technical and legal in addition to environmental issues to detect if the project is feasible. There are regulations and demands to the airport and the planes as well as the operating environment to enable activities in the airport area. An entrepreneur might need the co-operation partners and maybe some skills or assets to create this business. Biggest question of course is finding the customers and awakening interest in the product.

3.3 Dependability and Credibility

A search of the flight providers was made in the Northern countries, that means Finland, Norway, Iceland, and Sweden. When finding out lack of the providers the search was widened, and a British company came out. United Kingdom is quite different to northern countries and the prices and regulations might be not comparable, even if Britain was part of the European union until January 2020, but it does not change the experience that is created. The entrepreneur who was interviewed confirmed my findings of the amount of the companies offering this product.

This thesis is made related to the tourism studies and there is need to discuss an experience of the customer in addition to the technical issues of establishing a company or preparing the airfield. Thesis is written for bachelor's degree studies, so it will limit the amount of information that is included. This study will observe however the main principles and themes related to arranging these flights and having a departure at Sodankylä. Attention is paid to an experience design of the product but there is no interest to present a completed product. Aim for the commissioner is to find the needs that must be fulfilled to enable these flights.

This study maps the factors related to feasibility and discusses those, but this might not be considered an actual feasibility study. Feasibility study is tool utilised after business plan but related to this study there is no business plan nor purpose to create one. There is no discussion concerning starting the company or even the funding, but feasibility study method is adapted.

Two of the sources are bachelor level theses. Credibility of those is not proven but, in this case, I have used those as confirming studies, because there are some interesting results and other sources refer to same results. Huusko (2018) highlights the idea of creating package around core experience to reduce uncertainty. Ylimartimo and Manninen (2018) have found that the tourists have chosen a destination based on a nature experience and the prices of the activities are not affecting so much. Partanen (2013) failed in creating a Northern Lights product which confirms the complexity of creating a meaningful tourist experience and my other findings concerning features of the products.

Figure one is not academic source nor confirmed where the information comes and who is updating the page, but it is however used among people who hunt Northern Lights as a hobby (Vaara 2020). In this thesis the figure presents the view of complexity of forecasting Northern Lights

4 RESULTS OF RESEARCH

4.1 Interview with Entrepreneur

The interview gave good knowledge of this business and how it is executed in Lapland. There are only two providers to Northern Lights flights: Pitkämäki owns the company called Royal Reindeer and other flights are operated through Wild Nordic which has three other companies selling their product. Both are buying the flight services but from different providers and with a different kind of planes.

Royal Reindeer sells only the whole flight regardless of the number of passengers and Wild Nordic sells the seats to the flights. They use different type of planes and that affects to the flights. Royal Reindeer can take people higher and faster with Beechcraft and they have hardly any cancellations of the flights. Wild Nordic has not pressurised cabin in the Cessna they use and if the clouds are high, they have no opportunity to reach the top of those. (Pitkämäki 2020.)

Royal Reindeer sells in addition the transfer flights and even more of those than Northern Lights flights. Every flight they accomplish is tailormade for that customer group onboard. Wild Nordic has unchanging concept in all the flights and special wishes are maybe possible only with a special request. There is really no co-operation, because the companies operate with such a different concept, but both want to keep the customers happy and that way the flights going. (Pitkämäki 2020.)

Royal Reindeer reserves the plane for a weekend or pre-scheduled week to merchandise it in Finland. Northern Lights flights are reserved in a last minute and customers are the wealthier ones who find 3000 euros as spendable money. Transfer flights are executed mostly for one or two families who want to visit some other place than Rovaniemi or just have a sightseeing flight. Customers consider the flights precious but not a luxury. (Pitkämäki 2020.)

Customers for the flights are mainly from Asian countries. Somewhat Turkish and Israeli customers appear also. The Russian tourists have the money, but they want to be sure that there are Northern Lights visible before going. Pitkämäki finds potential in developing marketing and finding more customers. Customers

are anyway willing to pay for a better possibility to see Northern Lights. When a climate change seems to affect the winters so that there are increasingly more warm months with rain and fog it will also increase the demand to reach above the clouds. (Pitkämäki 2020.)

The planes are expensive and the regulations and the demands so high that it needs a good planning to keep the business profitable. Culture of using the flight services appears missing in Finland. The development should be in the supporting services rather than a flight itself. (Pitkämäki 2020.)

4.2 Existing Flight Products

4.2.1 Northern Lights Flights in Norway

In Norway, an airline called Widerøe operates Northern Lights flights. It is big operator regionally in Norway but operates flights also to the international destinations. The company has lot of information concerning Northern Lights in their web pages and links to activities. They tell about destinations they fly to and where the auroras are best visible but not mention the actual Northern Lights flights at all. (Widerøe 2020.)

Tromsø Budget Tours sells Northern Lights Flights in Tromsø. The flight operator is Widerøe and there are certain days when these flights are implemented because minimum number of passengers is twenty. Meeting point is at Tromsø Airport for this two-hour experience with one-hour flight, and one glass of champagne or another beverage and a snack are included in the price. There is a professional photographer onboard and the pictures will be available without an extra charge. Price of the tour depends on the seat that is booked. A window seat costs 3500 NOK when an aisle comes to 2900 NOK and with exchange rate in October 2020 (Bank of Finland 2020) those will be around 268 and 323 euros. (Tromsø Budget Tours 2020.)

On their webpage it is told to customers that Auroras are natural phenomena, and it cannot be guaranteed that they are visible, but if they are this is best option to see those. In the marketing they compare the flight with unpleasant drive with a bus that lasts for hours in the ground. (Tromsø Budget Tours 2020.)

Every Northern Lights Chase is a game of chance. Why not put the odds in your favour? Join us for a Northern Lights safari out of the ordinary! (Tromsø Budget Tours 2020.)

Pitkämäki tells that Royal Reindeer arranges private flights in Norden countries and many of them are from Rovaniemi to Tromsø, but they have sold the plane for Northern Lights flight also starting from Norway.

We have got customers from Norway so that we have left here to offer them flight in Tromsø (Pitkämäki 2020).

4.2.2 Northern Lights Flights in Sweden and Iceland

There are no arranged Northern Lights flights in Sweden. However, there is a possibility to rent a private plane from Jonair and go to see those or just fly to some place in the evening, but there are no packages or programmes available (Jonair 2020).

Icelandair markets Iceland as Northern Lights destination and sells packages to see those during the other activities but there are no special flights for that purpose available. There is however possibility to see Northern Lights during the flight to Iceland. (Icelandair 2020.)

4.2.3 Northern Lights Flights in Finland

In Finland there are two providers for Northern Light Flights: Royal Reindeer and Wild Nordic. Royal Reindeer sells tailor-made private flights and Northern Lights flights mainly starting from Rovaniemi. It is however possible to arrange flight departure from any airport to the chosen airport because they sell whole plane to every transfer. For the Northern Lights Flight, the trip is always tailor-made for those who buy it. Program varies depending on the customer and what they want. There can be for example some special program or refreshments prior to the flight. The basic product is a presentation in the hangar that includes the story of Northern Lights and how to predict those and of course briefing for the flight itself. Airborne time is approximately 55 minutes and with that time it is possible to fly

as far as Arctic Sea if needed to see Auroras and avoid the clouds. The online marketing highlights personalized service and experience in the sky.

Leaving any clouds below, you are up for a stunning view of the starry night sky (Royal Reindeer 2020).

Price for the whole trip is 3250 euros and it is for the whole plane regardless of how many passengers is on board and the maximum number of seats is eight. For Northern Light Flights there is however only seven seats available because those are executed with two pilots. Royal Reindeer uses Jonair as a flight operator which means that the planes and the pilots are from that company. Jonair is based in Umeå and specialized on business flights and in addition they operate regularly between Luleå and Pajala (Jonair 2020). There are two types of planes they use here in Finland: Beechcraft King Air 200 and Pilatus 12 NG which are both for eight passengers. (Royal Reindeer 2020).

Wild Nordic has JS Aviation as an operator in their flights. The plane is Piper 31 Chieftain which takes maximum seven passengers. Duration of the experience will be total two hours and that includes one-hour flight. There is minimum of two persons for execution of this trip. Operations happen daily from beginning of December until end of March at 20.30 in the evening. Hotel pickup and return, concerning city centre hotels, is included in their trip and there is safety briefing about the flight arranged in the airport prior to entering the plane. Price of this activity is 439 € per person and it is not recommended for young children. (Wild Nordic 2020.)

The flight needs to be cancelled time to time due to weather conditions when clouds are so high that it is not possible to fly above those with the plane they are using (Pitkämäki 2020). It needs to be a pressurised cabin to fly above 10000 feet because there is need for extra oxygen due to smaller air pressure (Regulation EU 965/2012). The company's online marketing is based on visualized story of the sky (Wild Nordic 2020).

Don't miss your chance to see the Northern Lights during your precious holiday time! Enjoy a wonderful journey through the star-studded sky in

order to see one of the most spectacular natural phenomena known to man. (Wild Nordic 2020).

4.2.4 Northern Lights Flights in United Kingdom

Omega Breaks is arranging the Northern Lights flights departing from Manchester, Glasgow, and Edinburgh. There is one-hour pre-flight presentation at the airport or the hotel where the astronomers tell about the sky and what is visible in there, in addition to predicting Northern Lights. The astronomers will take part in the flights and the story continues in there. To make sure that everyone has equal possibility to see the surrounding sky and phenomena in there, swapping of the places is arranged several times during the flight. There is also a possibility to buy all two or three seats in the row with extra price. Refreshments are served onboard while returning and the flight time is around 3 hours. Price of this excursion is starting from 229£ that is according to exchange rate in October 2020 (Bank of Finland 2020) about 253 euros. In marketing they consider professionals as the most important and special part of the flight. In addition to Northern Lights there is the sky full of stars. (Omega Breaks 2020.)

Throughout the flight, our astronomers will also give expert commentary on the many wonders you will see, from the Milky Way to Orion's Belt. Away from light pollution, this is perhaps the most vibrant you will ever see some of the more famous constellations. (Omega Breaks 2020).

There were not mentioned any minimum or maximum number of people or any information available of the plane either, but the plane is bigger than the ones used in Finland, because there are several seats in a row.

4.3 Legal Requirements for Airport and Flight Operator

European Union Aviation Safety Agency (EASA) has created common rules for activities related to aviation in Europe. In addition to this, each country has their own supplementing regulations. The national Aviation regulations include eight parts that regulates the operations related to aviation in Finland. There is General (GEN), Aerodromes and Ground Aid (AGA), Air Navigation Services (ANS), Airworthiness (AIR), Operations (OPS), Personnel Licencing (PEL), Training

(TGR), and Security (SEC) parts covered. Abbreviations are widely used in world of aviation and the topics are most often discussed only with those.

AGA is the most important part in this case because it tells how the airport needs to be equipped and maintained. The Required Navigation Performance (RNP) approach system might bring some new requirements, but those are not available yet, because this is first place in Finland applying a permit to start using the system and Traficom is still handling the application (Korvanen 2020.)

Aeronautical Information Publication (AIP) has a basic permanent kind of information about air navigation in Finland. There is one chapter concerning these GPS instrument flight procedures and it requires an autonomous monitoring of the satellites and predicting availability. There is also requirement of EGNOS NOTAM service to the airport that has a RNP approach system in use. (AIP Suomi / Finland 2020.)

Commercial flights are strictly controlled and prior to start operating a company needs an Air Operator Certificate (AOC) for which requirements are presented in EU regulations (Regulation EU 965/2012; 1139/2018). In addition to that, organization must apply for operating licence and a continuing airworthiness management organization approved by Traficom. (Traficom 2020.)

4.4 Technical Requirements for Airport and Flight Operator

Requirements are defined in addition to the legal ones according to the users. There might be requirements coming from the flight operator which can be crucial prior to landing at the airport. Company that owns the plane may announce specifications to the airport they want to use and if they are not fulfilled the plane will never arrive. (Korvanen 2020.)

Northern Lights flights will be implemented in the wintertime and that means dark, cold, and bad weather conditions. There is no air traffic control at Sodankylä, but it will be the RNP methods to guide planes safely in landing. The RNP means guidance with an assistance of the satellites using the GPS technique and it is used instead of a flight controller. Because there is nobody controlling the airspace near the airport it might require a radio mandatory zone to be

established and with that the take-off and the landing procedures can be ensured to be carried out safely even if there is some other traffic. (Korvanen 2020.)

The most important limitation concerning the plane that can be used in the airport is a length of the runway. At Sodankylä it is enough for most of the planes, the length is 1500 meters, but must be checked while winter conditions will reduce the friction and a braking distance will be longer. The winter maintenance of the runway and the apron are crucial to enable a take-off and a landing. The level of maintenance depends on the plane and the friction needed to stop the plane on the existing runway. (Korvanen 2020.)

When the plane spends a night at Sodankylä, it needs a shelter. The shelter is needed to protect the plane from snow and icing, but also warm shelter keeps equipment in better shape and keeps a plane and a cabin warm, which reduces warming up expenses. The shelter supplies a possibility to check the plane prior to the flight in good conditions and increases safety of the flight.

Conditions might form ice to plane's wings and the other critical parts and actions for removing it are needed. Equipment for spreading de-icing on the plane exists at the airport but those have not been used in years and might need some maintenance and updating. The flight operator presents requirements for the device and level of de-icing based on the plane they are using prior to arriving to the airport. (Korvanen 2020.)

It will be important to have a possibility to refuel at the same place, where the flight is operated and the plane overnights to avoid expenses caused by transfer flights. This is already arranged in Sodankylä and there is 100LL and JET available year around.

4.5 Airport Environment

Airports have general restrictions on moving in the area because of safety. In addition, there can be locally set instructions for every airfield. Airport needs a lightning that serves walking there without danger to get lost or hurt or even cause damage to equipment, planes, or property. There must be guidance to let the

customers know for sure where to go. Signs should point where to come in and how to get out.

Heimtun et al. (2014) as well as Partanen (2013) found out in their studies, that facilities must be available at every trip to keep the basic level of experience high enough. (Heimtun et al. 2014; Partanen 2013). At the airport or nearby needs to be at least toilets available.

To arrange a program or an activity prior to the flight, there is need for a space large enough to gather all the guests. Interior should be inspiring or at least comfortable, if not somehow special to create right atmosphere. For the presentations there are necessary equipment needed and for catering own requirements. The catering arranged on the spot might need an equipped kitchen with a set of dishes and cutlery. A customer needs a place to sit and table is needed in case of the snacks. It must be considered also weather conditions and temperature related to customer clothing and if they need to be outside.

There are two pilots and a possible guide who need own facilities depending on how long they will stay. Personnel needs the restroom and maybe a dressing room and a place to eat and most likely an accommodation.

4.6 Customers

A customer waits in addition to seeing Northern Lights to find a memorable experience. According to the price, expectations can be even higher, and they might expect some luxury elements during the trip. Pitkämäki tells that customer might consider extras like leather seats and less people present in a plane as a luxury (Pitkämäki 2020).

To arrange a holistic experience to the customer, the journey must start from the hotel they stay. The customer needs a transportation to the airport or if the program happens elsewhere through that place. The transportation to and from the airport might totally last 2-3 hours, depending where they stay, and the customer needs a program already on the way to the airport.

Maybe the biggest question is where to find the customers and who they are. Hotels in Sodankylä centre are mainly in use of workers who come around

Finland and some of them abroad. Kevitsa mining has plenty of season workers and some of them might stay even several months. Luosto in contrary is popular destination for the domestic and foreign tourists and there are safari companies and hotels which can act as a co-operative partner in marketing and selling the product.

Tourist come to Lapland to see the nature and the Northern Lights as a main attraction (Vilar 2020). They are the most important target group for these flights. Other group might be travellers who are interested in astronomy and everything related to it. Even locals like to watch Northern Lights and some of them has chasing those as a hobby and might be interested in astronomy in general level. Photographers are one group who might be interested in taking pictures of Auroras and maybe other phenomena in the sky from the plane.

4.7 Potential Collaborative Partners

An entrepreneur needs the collaborative partners to create a meaningful experience. There are special area activities involved and it is not worth doing everything by oneself. Services can be bought at least for the flight, transportation, catering, and the program.

There are several possibilities to find a co-operative partner who operates the flights. A good option would be one who operates already in the area and now there are Jonair and JS Aviation who implement Northern Light Flights in Rovaniemi. Co-operation is for that reason needed with other companies that arrange these flights.

Transportation for customers must be organised and depending on the size of the plane it might be one to eighteen persons at one time. Transportation can be arranged by a bus or a taxi company, depending on how many guests are there at the same time. At least local Luoston Taksipalvelu and JBus provide different size vehicles (Luoston Taksipalvelu 2020; JBus 2020).

Program that turns this trip an experience needs to be planned carefully. There is knowledge available in Sodankylä Geophysical Observatory (SGO) which is part of University of Oulu and have made research here already for decades

(Sodankylä Geophysical Observatory 2020). SGO would be interesting partner to utilise their knowledge in presentations and it is located in Tähtelä near the airport. Co-operation would supply credibility to experience and in addition to Northern Lights there can be information of stars and planets and whatever is happening in the sky. There is knowledge available and at least they could be in a consulting role, if not willing to arrange these presentations.

Catering must be arranged because the journey will be long for the customers. It can be executed by entrepreneur or bought from catering company. There must be considered that most of the customers might be foreigners, and the food must be something they can eat even produced locally. Several catering companies can be found in the area and the nearest operates already in Tähtelä area. Niesta Catering provides lunch in Tähtelä and offers catering services in addition to that (Niesta Catering 2020). Lapin Gourmetkokit is specialised in local food and specialities found in area and moreover they have reindeer of they own (Lapin Gourmetkokit 2020).

Need for collaborating appears also on selling the product in the places where the customers are. Marketing of the flights must be in co-operation with tour operators and safari companies as well as hotels. In Luosto major operator is Lapland Safaris as well as Lapland Hotels offering activities and accommodation (Lapland Safaris 2020; Lapland Hotels 2020). There is also Luosto Adventures operating in the area and it has mainly British customers (Luosto Adventures 2020). Many cabins are rented through Pyhä-Luosto Travel and it would be good to reach these individual customers too (Pyhä-Luosto 2020). As Pitkämäki told in the interview, commission of the sales is normally around 20% and, in this case, it means quite a lot of money and might accelerate the sales (Pitkämäki 2020). It needs however own marketing actions for individual travellers and co-operation partners are for example Visit Pyhä-Luosto, Visit Sodankylä, Visit Rovaniemi and Visit Lapland.

4.8 Economical Possibilities and Risks

Costs of establishing flight company and buying an aeroplane are high and flying takes money per hour. To keep operations profitable, the plane must be flying

regularly. Regular traffic between Sodankylä and another airport could allow keeping the plane here constantly.

If [the entrepreneur] starts the helicopter once a week it is much more expensive than flying regular route constantly between Fjällstation and Nikkaluokta (Pitkämäki 2020).

When the flights are arranged as an operator combining different parts without investments, the risk is not so big compared to situation that the entrepreneur has own fleet and buildings. Good example is the Royal Reindeer that has plane present only when it is already sold.

[...] the moment plane leaves from Luleå, when propeller starts rotating, the money is there (Pitkämäki 2020).

Profitability of the activity depends on how the price is set. Pitkämäki told that he sells only a whole flight and the price is same even if there are one or eight customers. This brings the entrepreneur a possibility to have all the expenses covered, but it might reduce number of the flights, because the price attracts only wealthier customers. Another company sells the flights with a minimum of two persons, but as it might cost around 1000 euros to fly their plane for an hour, it will not be profitable at all. (Pitkämäki 2020.)

Sodankylä airport has no commercial traffic now, but there will be a possibility to arrange those when RNP systems will be ready. There is strong will to build a large warm shelter for planes, when negotiations with municipality will be ready (Korvanen 2020). SWOT analysis (table 1) is made from the angle of the airport arranging the commercial flights in Sodankylä. In weaknesses is long distances for customers and ownership of the airport because it is owned by municipality and actions might be slowly made. There is however possibility to react quickly if the negotiations with municipality will as a result allow administration to ATS company (Korvanen 2020).

There is unbuilt land around the airport as well as inside the area and that enables opportunity to create other activities or build more within the aviation regulations. Bigger threats are related to municipality, if there is no will for developing the airport and air traffic but fill the area with other activities. It is also possible that

the municipality starts grasping and orders fees so high that the airport is not desirable for operators anymore. If the runway is not taken care of, it eventually prevents flying in the airport

Table 1. SWOT Analysis of Arranging Flights from Sodankylä

<p>Strengths</p> <ul style="list-style-type: none"> • No commercial traffic yet • Airport in fairly good condition • Flexible service available • RNP coming soon • Weather conditions mainly good • Situated between bigger places 	<p>Weaknesses</p> <ul style="list-style-type: none"> • Customers have long distances • Airport owned by municipality <ul style="list-style-type: none"> • Decisionmaking slow • No shelter • No personnel
<p>Opportunities</p> <ul style="list-style-type: none"> • SGO nearby • Maintenance possibility • Other activities possible to arrange • Existing buildings • Shelter already planned • Possibility to build more in the area 	<p>Threats</p> <ul style="list-style-type: none"> • Municipality does not want air traffic • Runway is not good enough – lacking maintenance • Municipality does not want to cooperate or give opportunity to this business

4.9 Sustainability and Responsibility

Flying is considered as a polluting and not sustainable way of moving. However, technologies are developing all the time towards reducing emissions. There are ways to compensate carbon dioxide emissions if those cannot be reduced. Every industry has a need to collaborate to find sustainable solutions for reducing emissions.

Airlines will face growing pressure to address environmental sustainability over the next five years (Wade et al. 2020).

One step towards less emissions in aviation is a collaboration Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA), established by the United Nations' International Civil Aviation Organization. Already 78 countries are involved and goal of CORCIA is to reduce 590 million tons of CO₂ by the year

2040. Another collaboration is EU's Emissions Trading System (ETS) that allows receiving and buying emissions allowances between participants. ETS has set limit to total amount of greenhouse gases and has set aim to reduce emissions 43% by 2030. (Wade et al. 2020.)

Pitkämäki (2020) thinks that there will be future for flying but it will take maybe ten years to start a new culture around flying. There are many areas where the pollution is still much bigger, but they are not in focus yet, like ocean-going vessels and industrial emissions. (Pitkämäki 2020.)

Even if changes in aeroplanes are extremely difficult, there is shift towards emission-free planes as fast as possible (Pitkämäki 2020).

Environment needs to be taken care of as much as we can. All leakages and trash need to be cleaned and treated properly. One issue are the de-icing chemicals and how they are collected to prevent soil contamination. There is need for environmental program to make sure that all possible risks are acknowledged and what are actions in case of something happens. Carbon footprint should be calculated.

Corporate responsibility has many kinds of descriptions as a concept. Basically, it means responsibility what the companies have towards for example customers, suppliers, employees, financiers, and community. It means also impacts that company has on society and environment according to the law and norms as well as ethics of behaviour. (Blowfield & Murray 2014.)

Responsibility needs to be shown in using local services and co-operative partners as well as local food. Reducing amount of waste is caring for nature and can be gained for example by using a real cutlery and avoiding the throwaway dishes. Equality between sexes and nationalities in addition to caring for the customers and employees will increase respect and satisfaction with the company. Environmentally reducing noise and emissions are important, especially because flying is criticised according to those.

5 CONCLUSIONS

5.1 Northern Lights Flights as Product

All the information that was found supported the idea to develop more Northern Lights activities and confirmed thoughts of combining more astronomy to the product. The findings confirm anyway that there is no point having only a flight with a possibility to see Northern Lights, but a program or activity that moulds it experience even if there is nothing to see. The important customer satisfaction is based on the actions of the guide and the supporting activities if Northern Lights are not visible. Pitkämäki also remarks supporting services in elevating the value of the product and turning it into an experience (Pitkämäki 2020). Omega Breaks has two astronomers telling about sky and stars and for example about the Milky Way in addition to the Northern Lights (Omega Breaks 2020).

Four realms of experience according to Pine and Gilmore (1999) are utilised in creating the product. The knowledge found in SGO and the airport surroundings as well as a smaller size aeroplane are not everyday life for most of the customers. When combined with actions where the customer can participate, the sweet pot of experience is reached. Schulze's (2013) thoughts of schematization and suggestion can be used to strengthen customers thinking and interest towards the product. In pricing and adding value to product can Pine and Gilmore (2011) help again with their concept of customization.

All companies use internet pages to create the pre-experience as tempting as possible. They describe the sky and supporting activities with superlatives in addition to Northern Lights. Predicting Auroras seems to be in core of the experience and Omega Breaks has also included professionals to tell about the sky.

All the information gathered will strengthen my own idea of creating program so that the flight itself is not actually the only reason to this trip, just one part of it. SGO in Tähtelä as a main co-operative partner would bring knowledge and surrounding for creating an appealing experience. There is of course a risk that if the tourist is only interested in seeing Northern Lights the program will raise the price too high. On the other hand, it is possible to find more customers, maybe

from Rovaniemi or Saariselkä area, if the relationship between price and the program is right. For the commercial secrecy reasons the product is not elaborated further in this thesis.

5.2 Feasibility of Northern Lights Flights

The answer to the question whether arranging the Northern Flight flights from Sodankylä would be feasible is yes. To the question whether it would be profitable answer is maybe. It needs good cooperation with other stakeholders to arrange this with the minimum risks.

It requires great assets to establish a company for flight operations and owning an aeroplane. To keep it profitable means that the plane needs to be flying more than one hour per day. Requirements are same for all size companies, and that is why it is not reasonable to establish own company but buy the flight service. When renting the plane, it will come with a necessary crew, depending on the plane and all requirements concerning flight operation will be taken care of. It would be best to co-operate here with other Northern Lights flight providers if there is possibility to use same plane in turns. Planes are now rented from Jonair that is located in Pajala Sweden and JS Aviation located in Joensuu Southern Finland and the transfer of the planes will already cost.

With my experience, I would not establish an airline based on Northern Lights (Pitkämäki 2020).

The type of the plane will be important. Existing service providers use two different types of planes. One arranges flights with Cessna that has not pressurized cabin and due to that, if the cloud is very thick, the plane cannot fly high enough to see the clear sky. A limited flight time means that there is no possibility to go farther to find better conditions either and the flight must be cancelled for weather reasons. Royal Reindeer arranges flights with that type of plane which has pressurized cabin. In return, it will be more expensive to use, but it has speed that allows flying farther and higher.

Another question is number of the seats in the plane because the price needs to be shared between the participants. Royal Reindeer sets the price per flight to

make sure that expenses are covered and there can be one to seven passengers. Wild Nordic charges per person and there is minimum number two persons, which is however less than expenses for the plane during that flight. Best efficiency might be reached with 19-seat planes that are of course more expensive to fly but has more seats to cover the expenses. (Pitkämäki 2020.)

No major changes are required in the airport, except the shelter to enable the commercial flights in Sodankylä. When the RNP system is ready, it can be utilized at once because there are no personnel needed for the landing and take-off. The maintenance needs to be arranged and other needs of flight operator checked. The amount of laws and regulations also proves that there needs to be a person who has familiarised with these to control the activities and maintenance in the airport.

Marketing actions are needed to reach as many interested customers as possible. In addition to local tourism operators the marketing needs to be wider. Visit Sodankylä, Visit Pyhä-Luosto, Visit Rovaniemi, Visit Lapland should be at least involved. The fact is that the more customers the more profitable the product will be.

Based on the information gathered, the best option will be to act as operator and build a package that can be sold as an experience. Currently there are no tourist activities available in municipal service centre of Sodankylä (Harjula 2020). Creating activities in the centre will bring the co-operational benefits to all the entrepreneurs.

These results indicate that the concept of arranging flights in Sodankylä will be feasible but there are many considerations prior to launching. Figure 3 gathers the topics that need to be considered. This list ignores the fact who is responsible for the parts but indicates what needs to be considered to enable the activity. Legal issues and technical demands concerning every part need to be checked and are not presented separately. Purpose of this list is to provide a tool to start building the environment and the product.



Figure 3. Subjects Concerning Feasibility of Northern Lights Flights

5.3 Dependability and Credibility

This paper has gathered information from perspective of customer experience and on the other hand, the entrepreneur who might be executing these flights as well as ATS company who would be taking care of facilities at the airport. This thesis is related to tourism studies and that is why technical and legal issues are covered only in general level. There are, however, principles and information listed how to proceed in these areas.

There are only few providers to these flights and that is why there is not so much information available and creating a new product has many opportunities in creating as well as minefields to fall into. The interview was executed only with one entrepreneur who arranges these flights, but it gave however good overall picture of this field of business. The entrepreneur is pilot himself and he has knowledge what is happening in another company too and knows possibilities of different kind of aeroplanes.

In this study the expenses of activities are not presented, because this might be even my business one day and there is no interest in showing those to others. For the same reason there is no specific description of the product. Those are not the main interest of the commissioner either.

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6 DISCUSSION

Goal for this thesis was to observe how much Northern Lights flights are executed and determine whether those would be feasible from Sodankylä. Not many providers exist, but the core idea of the available products was found with a search in internet and interview of the entrepreneur.

Sodankylä Airport Technical Service Oy as a commissioner was interested mainly what needs to be done and considered at the airport to enable business related to commercial flights. This thesis discusses topic however more from entrepreneur's side and how the product can be created. Demands for the airport will come anyway mostly through regulations and flight operators.

The theory of experience creation is in the core of the product and can be applied easily. For the feasibility, the laws and regulations play important role defining the environment. This study has listed needs and considerations when starting commercial flights and requirements for entrepreneur to start Northern Lights flights from Sodankylä.

Even if being a pilot myself, there are many regulations that I have not needed before and it was numerous hours reading and searching to understand a whole picture concerning the airports and commercial flights. Difficulty in writing this thesis was the level of explanations because I am familiar with a topic and when this is written to readers in tourism field the subjects related to flying are not familiar.

Worldwide pandemic COVID-19 started at the same time as I started my thesis. I planned to interview flight operators as well as DMCs to detect best practises and figure out best way to market and implement these flights. That felt not a good solution subsequent to the pandemic started, because companies were struggling for existence and had focus in other matters. Part of the information in this thesis was searched in March 2020 prior to closing actions, luckily, because the information has changed during the pandemic. For example, Omega Breaks has removed prices and Tromsø Budget Tours informs on their web page in October 2020 that they provide no tours because there are no visitors.

When starting this thesis, I thought that arranging Northern Lights flights could be my future business or at least part of it. It still can but cannot be implemented in near future because of the pandemic. It might take time before the tourists return in similar numbers than in situation prior to the pandemic.

The thesis has reached the goal and answered the questions set in the beginning. I hope that the execution can also be possible. Profitability of this product needs however meticulous planning and collaboration. The Northern Lights flights would stimulate the tourism industry in the centre village of Sodankylä and bring benefits to several companies and increase the recognition of the municipality.

Future study could interview customers how they find the products and DMC: s to determine how the sales and marketing are suggested to be organised. Exploring motivation of the customers will benefit a product creation and developing the business.

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Topics and questions of theme interview

Business idea concerning northern light flights

- What is main business?
 - What gave idea of northern light flights?
 - Where are operating places?
 - Who owns the plane?
 - Who is operating planes?
 - What about spare planes?
 - Who sells the flights?
 - Is there co-operators and partners?
- ## Product
- What is the product for customer?
 - What are additional activities and who operates those?
 - What makes it experience?
 - How do you see price level?
- ## Executing
- How often the flights are executed?
 - When the flight is confirmed?
 - Are there cancellations? By whom and how much?
 - Are customers cancelling when its clear sky? Other reasons?
 - Are customers buying in last minute or earlier?
 - What are cancellation terms?
- ## Who is Your Customer?
- B to B / B to C?
 - What is target group?
 - Do customers consider it as luxury?
 - Is the customer the right one for the business?
 - Are right customers reached?
 - How do you see development in amount of interested customers?

Marketing actions

- How do you reach customers?
- What kind of marketing actions you do?
- Main channels in marketing?
- How do you collect feedback?
- What are complaints about?
- Do you have plans for developing customer experience?
- Commission? (DMC)

Problems

- customer, product, co-operation, facilities, authorities?
- What is needed most?
- What is worst you can do?
- Why do you think there is not more offerings now?

Laws or regulations

- Expenses, workload, personnel, company
- If you had all the power, what would you do?

Co-operation in the field

- How can you benefit from co-operation?
- What kind of co-operation is needed?
- What needs to be developed with co-operations?
- Is it possible to do business year around?
- Can co-operation help with widening timeline?

Competition in the field

- Does competition help or limit your business?

Future of Northern light flights