The Impact of Airbnb Hosts on Arctic Local Economies: Consumption Patterns, Entrepreneurship and Sustainability

Airbnb-værters effecter på de arktiske lokale økonomier: Forbrug, iværksætteri og bæredygtighed

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Project group

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Scandinavian summary

Dette projekt undersøger, hvorvidt Airbnb-værter bidrager til bæredygtig udvikling af turisme i periferielle arktiske regioner. Antallet af Airbnb-værter er steget i periferien i det seneste årti. Det tiltrækker flere turister, som er en alternativ indtægtskilde og giver muligheder for lokale iværksættere. Airbnb-turisme kan have positive og negative konsekvenser for de lokale økonomier. Projektets hovedmål er at anvende en empirisk, kvantitativ og kvalitativ forskningsmetode til at studere Airbnb-værter og deres bidrag til en bæredygtig destinationsudvikling og samfundsdannelse i lokale økonomier i casestudieregionerne Nordjylland (Danmark), Nordøen (Island) og Nordland (Norge), der repræsenterer typiske arktiske og nordiske perifere samfund og økonomier.

English summary

This project investigates how Airbnb hosts contribute to the development of sustainable tourism in remote Arctic regions. The number of Airbnb hosts has been increasing in peripheries in the past decade, attracting tourists as an alternative source of income and providing opportunities for local entrepreneurship. Airbnb-based tourism can have both positive and negative impacts on the local economies. The main goal of the project is to apply an empirical, mixed-methods research approach to study Airbnb hosts and their contribution to sustainable destination development and community formation in the local economies of the case-study regions of Northern Jutland (Denmark), North Iceland (Iceland), and Nordland (Norway), all of which represent typical Arctic and Nordic peripheral communities and economies.

Chapter 1: Introduction

1.1. The Motivation of the Project and the Research Questions

In the past years, the sharing-economy platform Airbnb has created manifold opportunities for low-cost accommodation and motivated the increasing frequency of travel and tourism (Guttentag, 2015). Both individuals and professional businesses have been renting out 'under-utilised' housing spaces (e.g., rooms, apartments, cottages, and entire houses) on a short-term basis in return for monetary exchange (Vinogradov et al., 2021). In many regions, Airbnb hosts have become an important complement to the existing hospitality and accommodation infrastructure, notably where there is rather "thin" or sparse infrastructure in terms of hotels, Bed and Breakfast (B&B) pensions, and camping sites. Airbnb hosts can thus provide housing space to tourists, in general, and attract new types of travellers to rural regions, in particular (Leick et al., 2022; Larpin et al., 2019; Paulauskaite et al., 2017).

This form of tourism has turned out to be a double-edged sword for the local economies, as it takes place mainly in a mostly unregulated marketplace (Vinogradov et al., 2020). Airbnb tourists have positive effects on local economies by raising the daily spending on tourist attractions and amenities, such as museums, restaurants, shops, and other services, and more extended stays, compared, e.g., to hotels (see Boswijk, 2017). An increase in the local supply of low-cost accommodation raises the demands for tourist facilities and contributes positively to the provision of local products and services (Zhang and Javakhishvili-Larsen, 2021; Leick et al., 2021). Renting out housing space via Airbnb generates additional income for private households and motivates small-scale tourism entrepreneurship (Leick et al., 2021; Boswijk, 2017). In theory, all the social layers of households may be empowered to use the sharing-economy platform to provide affordable accommodation services for incoming tourists, which might alleviate local unemployment, reduce social transfers, and reduce or avoid poverty (see Sperling, 2015). However, Airbnb-based tourism also has negative effects. It creates overly excessive tourist activities in the popular destinations, notably during the high season (Álvarez-Herranz and Macedo-Ruíz, 2021), and it also competes with other common low-cost accommodation facilities in rural regions (B&Bs, hostels, camping sites, etc.; see Leick et al., 2022). In the literature, further negative externalities are highlighted, such as the segregation of communities and negative impacts upon the social fabric of the local neighbourhoods (Helgadóttir et al., 2019; Ioannides et al., 2019) through gentrification and price increases for rentals. Another big issue is the question of the regulation of the mainly unregulated Airbnb business, which will affect both hosts and guests (Vinogradov et al., 2020).

In view of these dual effects, the state-of-the-art literature has hitherto mostly explored the perspective of Airbnb users (e.g., Cheng and Jin, 2019; Chen and Chang, 2018), and, with regard to Airbnb hosts and their operations, mostly investigated urban areas and large cities (see, for instance, Amore et al., 2022). By contrast, almost no research has been devoted to the perspective of Airbnb hosts and their possible contribution to the development of local tourism. Hence, the ***point of departure in this project*** is ***the wide gap of knowledge about the positive and negative Airbnb-related effects with regard to Airbnb-host activities in local economies, applied to Arctic rural regions***. The project seeks answers to the question of how Airbnb hosts in these rural contexts contribute to the development of sustainable tourism (Bogason et al., 2020).

More precisely, this project aims to shed more light on three research questions:

- ***Research question 1: What are the characteristics of the entrepreneurship of the Airbnb hosts in the three Arctic rural regions?*** (**Chapter 2**)

- ***Research question 2: What can be said about the consumption of Airbnb hosts in the three Arctic rural regions?*** (**Chapter 3**)

- ***Research question 3: What effects do Airbnb operations have on local tourism networks in the three Arctic rural regions?*** (**Chapter 4**)

1.2. The Contribution of the Project to the Sustainable Development Goals (SDGs)

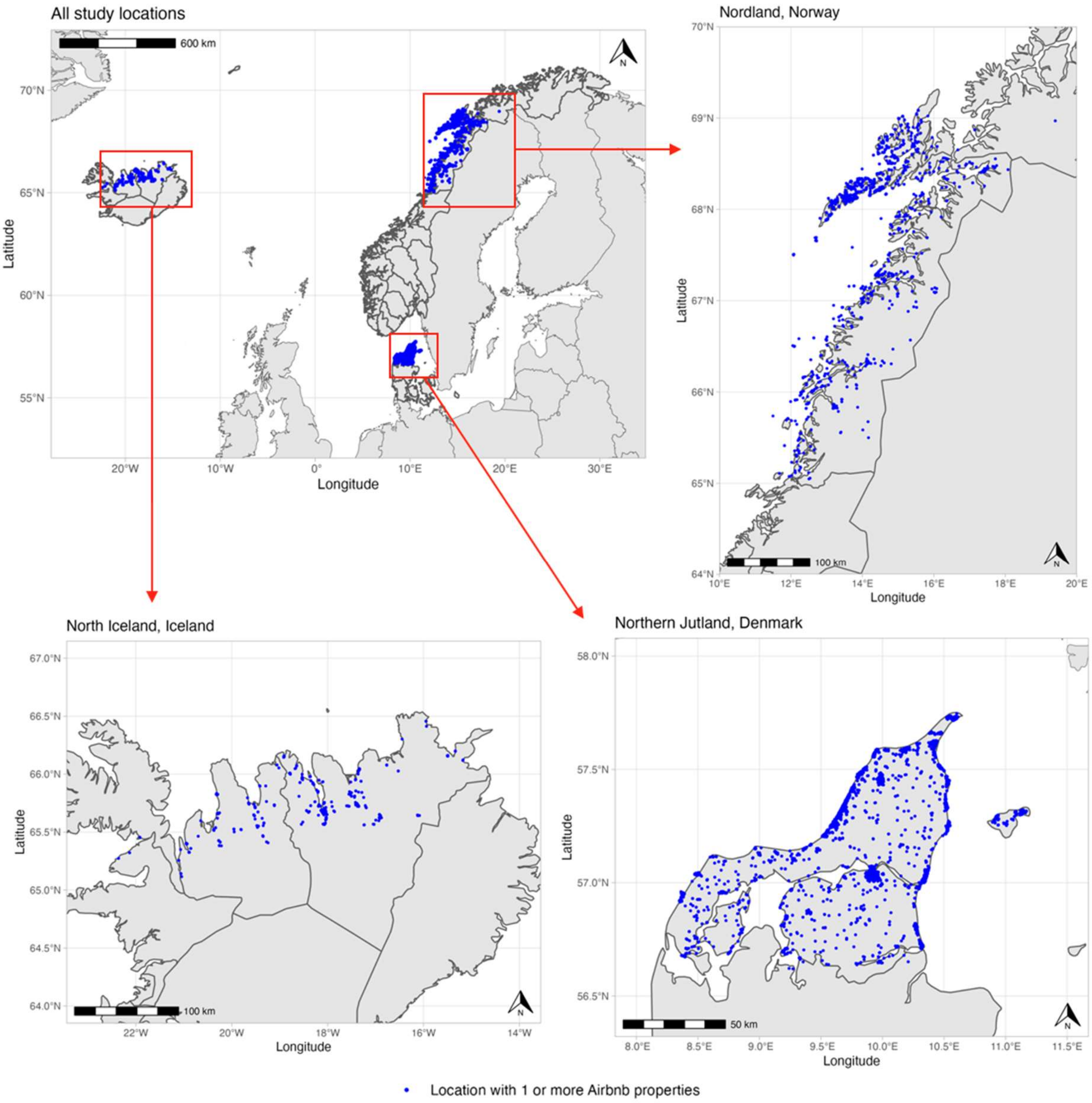
The project is relevant for several SDGs prioritised by the Arctic Co-operation Programme. The sharing economy provides new opportunities for the regional organisation of work and entrepreneurship, specifically in the peripheral areas of the Arctic where "regular", and full-time, employment opportunities are scarce compared to more central and urban regions of the Nordic countries (SDG #8, decent work and economic growth). The project also explores the innovative potential of the existing platform-based solutions with regard to fostering innovation in communities, and, through entrepreneurship, notably small-scale, and micro entrepreneurship (SDG #9, industry, innovation and infrastructure). Finally, sharing-economy solutions expand beyond the existing industrial, organisational and geographical borders and provide new ways for peer-to-peer, business-to-business and citizen-to-government relationships across various geographical scales (SDG #17, partnership).

Our focus on the development and sustainability of tourism contributes to the Arctic co-operation programme's target in the areas of innovation/entrepreneurship, digitalisation, and local businesses, including tourism. As this project focuses on discovering the opportunities for local households and businesses in the remote areas, characterised by low population densities and questionable infrastructure, digital entrepreneurship, including micro entrepreneurship and the hybrid entrepreneurial activities of private households is a key to success. By addressing these SDGs, the project will shed light on how Airbnb hosts contribute to the development of sustainable tourism in the Arctic and Nordic regions.

1.3. The Selected Arctic Rural Case Regions

Figure 1 illustrates the selected case regions, including the Airbnb hosts that were identified for the winter of 2021 with the location of their listings in the case regions (see, also, Leick et al., 2023).

Figure 1: The distribution of Airbnb hosts with their listings in the three Arctic and Nordic case regions



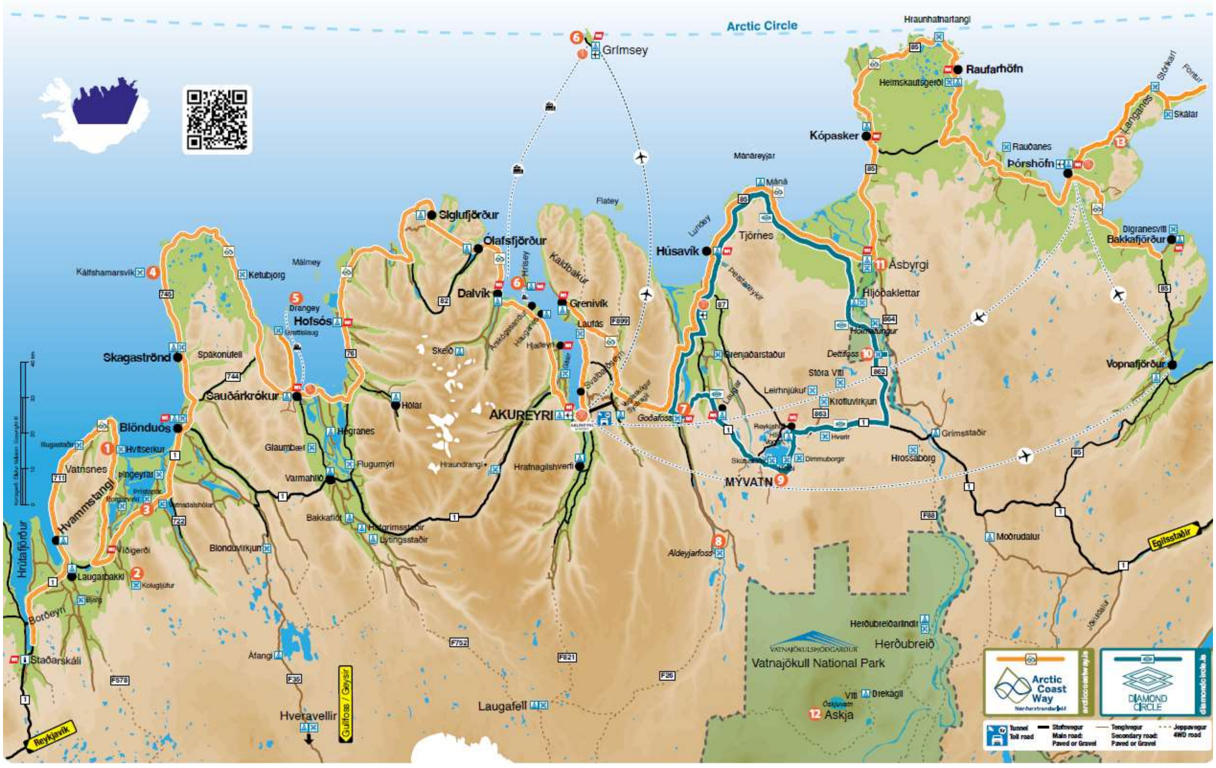
Source: Leick et al. (2023).

Tourism in North Iceland, Iceland

North Iceland is a region characterised by vast coastline and sparsely populated rural areas, in total close to 39,000 inhabitants in a land area of 36,530 km². Tourism has gained an increasing importance in the region, as in other parts of Iceland. In 2019, there were around 300 registered tourist businesses in the region, and almost 2,300 employees in the tourism sector (Samtök ferðaþjónustunnar, 2023). In 2022, nearly 1,700,000 foreign tourists visited Iceland, around 34 per cent of whom visited North Iceland and less than a quarter stayed overnight (Ferðamálastofa, 2023). Thus, tourism stakeholders in the region have emphasised the importance of obtaining a larger share of the overall tourist economy. Tourism in the area is largely marketed by *Visit North Iceland*, which serves as a platform for the tourism stakeholders in the region. *Visit North Iceland* is financed by the Icelandic Ministry of Industry and Innovation, 20 municipalities in North Iceland, and around 270 member companies.

Icelandic tourism is dominated by diverse nature tourism, and tourism in the North of Iceland is no exception. The most popular tourist destinations in the region are Dettifoss, Europe's most powerful waterfall, and Mývatn, a geothermal region with hot springs, volcanic areas, craters, geothermal nature baths, and lava formations. In 2019, *Visit North Iceland* formally launched a new travel route called the Artic Coast Way, which covers the entire coastline of the region (900 km) and brings tourists from the more travelled routes towards the less travelled ones (Arctic Coast Way, 2022; Figure 2).

Figure 2: Touristic map of North Iceland



Source: *Visit North Iceland* (2023). https://www.northiceland.is/en/travel-trade/brochures.

The largest population centre in the region is Akureyri (with a population of 20,000 inhabitants), which is also the largest town outside the capital region. In recent years, a growing emphasis has been on offering direct flights to Akureyri, not least to combat seasonality in tourism and increase the number of visitors to the region. Thus, charter flights from the UK and The Netherlands have been regularly offered in recent years, and, in 2023, regular flights are scheduled to Switzerland and the UK.

In 2021, the total number of overnight stays in North Iceland was around 890,000 (Statistics Iceland, 2023), most of which occurred in the Akureyri region, where there have been complaints that a shortage of hotel rooms exists (Túristi, 2022). No information regarding Airbnb overnight stays in the whole region exists, but, in 2021, around 170,000 Airbnb overnight stays were registered in Northeast Iceland (this part includes Akureyri, the biggest population centre) (Mælaborð ferðaþjónustunnar, 2023). In 2022, a total of 243,000 Airbnb overnight stays were registered in the Northeast, which is a substantial increase, compared to the previous years.

In 2016, the Icelandic parliament passed a law that puts a limit on Airbnb rentals and applies penalties if those limits are broken. Thus, individuals can apply for a home-rental license that allows them to let a room or an entire property for a maximum of 90 days in an almanac year, and the income cannot exceed two million Icelandic Króna (ISK). A maximum of two properties can be listed with no more than a maximum capacity of five rooms or space for ten individuals (Island.is, 2022a,b). Anyone who wants to have the possibility of renting out property for a longer period on the platform must apply for an operator’s licence and register as a business with the tax authorities (Island.is, 2022b).

Tourism in Northern Jutland, Denmark

Northern Jutland covers 7,886 km² and is the most northern region of Denmark. With its 11 municipalities, it has 591,000 citizens (Region Nord Jylland, 2022). The largest city is Aalborg. Tourism plays an important role for this region, and Airbnb-based tourism has been on the increase in Northern Jutland, as in other rural regions (Zhang & Javakhishvili-Larsen, 2021): about 159,000 overnight stays with Airbnb were registered in 2017, of which 102,000 were recorded in the rural part of the region outside of Aalborg.

The importance of the tourist sector for Northern Jutland becomes even clearer when one considers the latest developments within this industry. After the global financial crisis of 2008, regional tourism declined, and the number of overnight stays decreased greatly. While the number of overnight tourists started to increase again throughout the whole of Denmark from 2013 onwards, this was not the case for Northern Jutland until 2019. In 2019, the number of overnight stays by tourists in Northern Jutland increased significantly and was amounted to nearly 4.7 million overnight stays, according to Eurostat (2023). In the subsequent years (2020, 2021), the number of overnight stays decreased, compared to 2019, but remained close to 4 million (Eurostat, 2023). Interestingly, the destinations outside of Aalborg accounted for most of this steep increase in tourism. In parallel, the Airbnb-based overnight stays also increased strongly in Northern Jutland (while the rise was comparatively lower in Aalborg). Altogether, these developments highlight that rural tourism in Northern Jutland, including Airbnb-based tourism, is important for this case region. Summer cottages rented by international travellers are a key part of this tourism. In Denmark, rentals through Airbnb are restricted to the owners of properties, who are allowed to rent out through Airbnb or similar platforms for up to a maximum of 70 days per year.

Tourism in Nordland, Norway

Nordland is located in the high North of Norway, close to the Arctic Circle. Within Norway, Nordland represents a rather sparsely populated area (with a total of 240,190 inhabitants) that covers a large land area of 35,759 km² (Statistics Norway, 2022a). As in other Arctic regions, tourism in Nordland benefits from natural amenities, and nature- and experience-based tourism plays an important role in the regional tourism sector. Tourism has been on the rise in Nordland in the last decades both with domestic travellers and international tourists (for example, through cruise ship tours, such as Hurtigruten Expeditions, and organised or individual fishing, hiking and sailing tours). In addition, business trips through, e.g., conference travel, are also important for Nordland. Regarding leisure tourism, tourism takes place both during the short summer seasons and the winter. In total, an increase of over 20 per cent in registered overnight stays at hotels and camping sites was recorded between 2010 and 2019 (Statistics Norway, 2022b). Thus, traditional accommodation providers are important players that absorb the demand for accommodation: about 1.34 million overnight stays took place in hotels in 2019 (Statistics Norway, 2022b).

Recently, tourism through the Airbnb platform has grown significantly in Nordland. For instance, already in 2019, Airbnb accounted for 17 per cent of all overnight stays in the region (KBNN, 2022). In 2019, a total of 397,000 overnight stays were booked through the Airbnb platform. In the summer season of 2019, 174,000 guest nights were registered at Airbnb-listed accommodations, while 965,000 overnight stays at traditional accommodation companies were registered (KBNN, 2022). Airbnb-based tourism is concentrated in some renowned tourist destinations, such as the Lofoten Islands, where the excessive inflow of tourists during the high season presents problems. Airbnb offerings are also present in other parts of Nordland region. According to the current rules, there is no regional regulation of Airbnb host operations in Nordland; only in housing co-operatives is there a cap on the number of nights during which accommodation can be rented out without the permission of the board of the housing co-operative. Due to the recent increase in Airbnb-based trips to Nordland, the negative effects of this type of tourism for this region have been discussed (for example, Vinogradov, 2017).

1.4. The Empirical Approach

The project applied a mixed-methodology research approach in line with contemporary research in entrepreneurship and tourism (see, for example, Khoo-Lattimore et al., 2019; Molina-Azorín et al., 2012). The empirical objectives are organised around two milestones (Table 1): Firstly, the project explored Airbnb hosts in the Arctic rural regions on a micro-level spectrum, i.e., their characteristics, entrepreneurship, and consumption in the case regions. Secondly, the project studied Airbnb hosts in a macro-level spectrum, i.e., as local economic actors aligned to tourism networks with their effects on the development of local tourism in the case regions.

Table 1: Overview of the empirical work and dissemination activities

Data collection	Empirical work and dissemination activities
Micro-level exploration: Airbnb host profiles (2021-2022)	• As the data about Airbnb hosts and Airbnb activities are not officially available or accessible, one of the tasks of this project was to collect the qualitative and quantitative data for the study. • Data collection activities took place through data retrieving from the Airbnb website (in the winter of 2021; 5,875 Airbnb properties associated with 3,246 Airbnb hosts) and a phone survey among a total of 62 Airbnb hosts (in the first half of 2022) in the case regions. • The findings were analysed and disseminated in the form of preliminary analyses, scientific papers, two conference presentations (21st Nordic Conference on Small Business Research, May 2022, Kolding, Denmark; 31st Nordic Symposium on Tourism and Hospitality Research, September 2023, Östersund, Sweden) and webinars (web seminars) with key stakeholders.
Macro-level exploration: The analysis of Airbnb hosts in relation to local tourism networks (2023)	• Further analyses were conducted for the case regions to study the role of Airbnb hosts and their integration in the local tourism networks, and the impact that the Airbnb hosts make locally, in terms of their operations. • Data collection on Airbnb hosts took place in 2023 through 3 focus-group interviews with 15 participants in total, and 5 individual follow-up interviews with Airbnb hosts and local tourism stakeholders. • The findings were analysed and disseminated in the form of preliminary analyses and through webinars (web seminars) with key stakeholders.

Source: Own illustration.

It should be noted that, for all empirical work conducted during this project, the research design, such as the data retrieval from the Airbnb website, or the selection of the interviewees, was not based upon a random sampling strategy. Thus, the results presented are only generalizable, to a limited extent, to the general population of Airbnb hosts in rural regions, in general. Instead, the primary goal of this project was the generation of in-depth knowledge, which is missing in the bulk of the literature (for instance, about the characteristics of Airbnb hosts as entrepreneurs, including their professional behaviour and performance, their socio-economic characteristics, and about the effects of Airbnb hosts on tourism networks). For the further guidance of the reader, Appendix 1 provides the interview questionnaire that was used for the phone interviews in 2022, and Appendix 2 provides the interview guide that was used for the interviews with local tourism stakeholders and Airbnb hosts in 2023.

Chapter 2: The Characteristics of the Entrepreneurship of the Airbnb Hosts

2.1. Research Question and Literature Review

The proposed rationale of Chapter 2 is as follows: in the context of remote and rural-peripheral Arctic and Nordic regions, the development of sustainable tourism, including Airbnb tourism, can offer opportunities for local residents, such as private households and registered companies, to engage as entrepreneurs on the Airbnb platform. This entrepreneurship can have positive effects on the local economies through micro-entrepreneurial activities in tourism and the provision of local products and services.

This rationale is backed up by contemporary entrepreneurship research: Airbnb hosts are commonly described as micro-entrepreneurs, who are motivated to engage enterprisingly with their service offerings on the platform by the incentives to increase their household income (Leick et al., 2022; Fischer et al., 2019). This type of starting a micro- or small-scale business on the Airbnb platform is often associated with entrepreneurship that is 'driven out of necessity', rather than opportunity alone (Fairlie & Fossen, 2018). The increasing frequencies of commercial actors, for instance, established tourism companies, utilising Airbnb as a promotional and distribution channel (Cocola-Gant et al., 2021; Griggio & Oxenwärdh, 2021) cannot be explained with necessity-driven entrepreneurship, because these Airbnb hosts demonstrate a professionalised approach and use specific strategies, such as pricing or marketing strategies, to differentiate their offerings according to the opportunities that arise (Casamatta et al., 2022; Abrate et al., 2022; Chung & Sarnikar, 2021). In addition, it is known that entrepreneurs in tourism and hospitality are often motivated by lifestyle considerations, rather than the afore-mentioned opportunity-driven type of entrepreneurship (Bredvold & Skålén, 2016). Hence, the rationale in this section is that there is more variety among Airbnb hosts as entrepreneurs than only the necessity-driven *versus* opportunity-driven types of hosts (see Giacomin et al., 2011). **Research Question 1**, which guides this section, is: **What are the characteristics of the entrepreneurship of the Airbnb hosts in the three Arctic rural regions?**

This chapter firstly describes the characteristics of Airbnb hosts in the case regions, their entrepreneurial engagement, and the motivations for their entrepreneurship. Section 2.2. investigates the socio-economic characteristics (e.g., gender, age, education, employment status) and the geographical location of the Airbnb hosts. Section 2.3. explores what the characteristics of the service provision of the Airbnb hosts are, while Section 2.4. focuses on the question of their motivations and incentives for their engagement on the Airbnb platform. Section 2.5. looks more closely into their profiles, i.e., how the Airbnb hosts differ in their entrepreneurial activities. The results presented in Sections 2.2., 2.3. and 2.4. stem from the phone survey performed in 2022 among selected Airbnb hosts (n=62) in the case regions (see Table 1), while Section 2.5. provides the results from the data retrieval from the Airbnb website in 2021 with a total of 5,875 Airbnb properties associated with 3,246 Airbnb hosts (see, also, Leick et al., 2023).

2.2. The Airbnb Hosts and their Socio-economic Characteristics

With regard to the socio-economic background of the Airbnb hosts (Table 2), there is a higher share of female (63 per cent) than male (37 per cent) Airbnb hosts. The largest age group represented in the sample is hosts in the active work age, i.e., aged between 36 and 60 (62 per cent of the hosts). Both young hosts (aged 18-35, 6 per cent) and elderly hosts (aged 61-75, 28 per cent) are less represented in the sample.

The educational level of the Airbnb hosts is rather high (38 per cent of the hosts hold a bachelor degree, and 20 per cent hold a master degree or higher qualification, corresponding to a total of 58 per cent of hosts with a higher-educational degree). Less hosts (30 per cent) have a professional education, and 12 per cent only have primary education. 40 per cent of the Airbnb hosts in the sample, moreover, stated that their income was above average (compared to 20 per cent with average income, and another 20 per cent with below-average income).

The prevailing type of profession with the hosts (50 per cent) is office or administrative work. Less represented are farmers (11 per cent), various other industries (16 per cent) and self-employed business owners. Only 13 per cent of the Airbnb hosts are retired persons, and 3 per cent are students. Hence, there is a low representation of younger, poorly educated, unemployed, or retired hosts, and hosts taking higher education, respectively, while the hosts seem to be working-age employed individuals with higher levels of education and average or above-average income levels.

Table 2. The socio-economic background of the Airbnb hosts (n=62)

	n	%
Gender		
Female	41	64%
Male	23	36%
Age (grouped)		
28-40 years	5	8%
41-50 years	19	30%
51-60 years	18	28%
61-70 years	17	27%
71 years or more	5	8%
Education		
Primary school/High school	6	9%
Professional education	17	27%
Bachelor's degree	25	39%
Master's degree or higher	12	19%
Other	3	5%
Prefer not to respond	1	2%
Employment		
Self-employed	28	44%
Employed	23	36%
Unemployed	2	3%
Retired	10	16%
Disabled	1	2%
Income		
Lower than average	12	19%
Around average	12	19%
Higher than average	33	52%
Prefer not to respond	7	11%

Source: Own illustration.

2.3. The Characteristics of the Airbnb Hosts as Service Providers

As Table 3 illustrates, the majority of the Airbnb hosts have been operating on a medium- or long-term basis on the platform (with more than a year of letting time), and only a small share (9 per cent) joined Airbnb as hosts recently (with less than a year of letting time). 42 per cent of the Airbnb hosts operate throughout the entire year, and the same share of hosts (42 per cent) also operates on other digital platforms, e.g., booking.com. These figures illustrate that the Airbnb hosts possess sound experience as service providers and seem to offer their services not only sporadically, but rather continuously, which benefits guests seeking accommodation in the rural regions. Hosts on Airbnb furthermore utilise several platforms as service providers.

Table 3. Airbnb hosts' characteristics (n=62)

	n	*%*
Letting time		
Less than a year	4	9%
1-3 years	15	33%
4-6 years	17	38%
7-9 years	9	20%
Number of letting months per year		
1-3 months	12	19%
4-6 months	12	19%
7-11 months	13	20%
Whole year	27	42%
Offers services on other platforms		
Yes	27	42%
No	37	58%

Source: Own illustration.

2.4. The Entrepreneurial Motivations and Incentives of Airbnb Hosts

Concerning the hosting practices (Table 4), the Airbnb hosts do not typically spend many hours on the management of their property or properties, and they do not typically employ staff (e.g., cleaning staff) to manage the property or properties. Moreover, the majority of the Airbnb hosts (62 per cent) do not follow Airbnb's pricing suggestions. However, 52 per cent of the Airbnb hosts surveyed offer extra services to guests, while 48 per cent do not do this. The answers with regard to the hosting practices provide the following impression about the hosts: the Airbnb hosts surveyed seem to manage the properties listed themselves and take care of pricing issues independently, and, at the same time, they seem to offer additional services to guests.

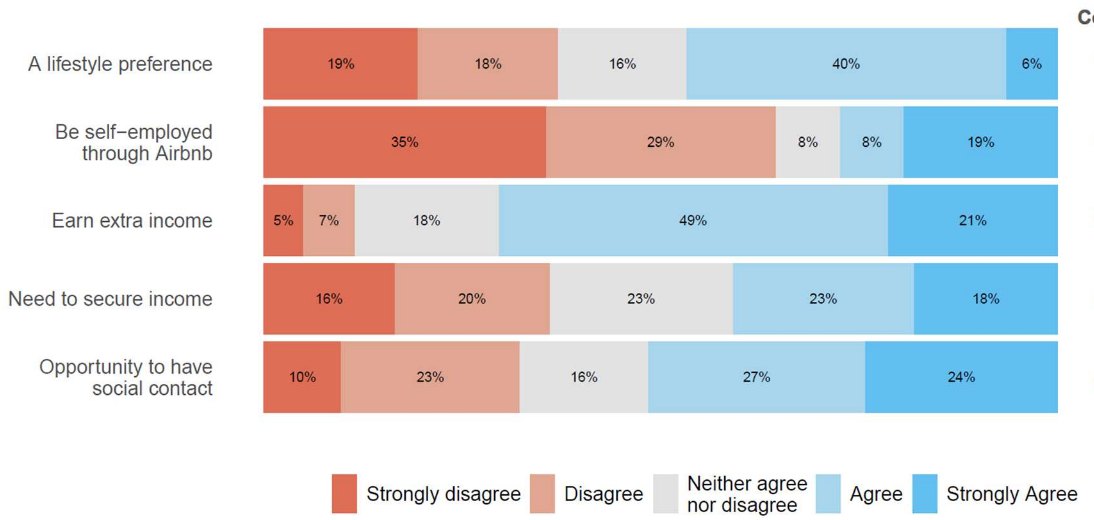
Table 4. Hosting practices (n=62)

	n	%
Hours spent managing		
One or less	10	17%
2-4 hours	19	32%
5-10 hours	17	29%
More than 10 hours	13	22%
Number of employees		
No employees	36	56%
One employee	15	23%
Two employees	9	14%
More than two employees	4	6%
Follows pricing suggestions		
Yes	18	28%
No	43	67%
Doesn't know	3	5%
Provides extra services		
Yes	33	52%
No	31	48%

Source: Own illustration.

With regard to the entrepreneurial motivation of the hosts (Figure 3), the main motives for the Airbnb hosts to operate on the platform are the earning of extra income (68 per cent of hosts agree or strongly agree), Airbnb letting as a lifestyle preference (47 per cent of hosts agree or strongly agree), and the motivation to have more social contacts (52 per cent of hosts agree or strongly agree). Hence, the prevailing motivation seems to be a mix of economic and social motives. Less important is the need to secure their income through Airbnb (40 per cent of hosts agree or strongly agree), which points to less necessity-based entrepreneurial engagement on the part of the Airbnb hosts in this sample.

Figure 3. Airbnb hosts' motivations (stacked bar plots)



Source: Own illustration.

2.5. The Professionalisation-Performance Profiles of the Airbnb Hosts

Moreover, the Airbnb hosts identified in the case regions were classified according to the number of listings, or properties, that they own and manage, respectively, and their registered business activity. This classification serves to explore their professionalisation as entrepreneurs. The analysis of the hosts according to this classification results in a broad profiling of the Airbnb hosts in the three case regions. Firstly, the Airbnb properties and hosts are not evenly distributed across the sample regions: about 60 per cent of the properties investigated are located in Denmark, while it is 30 per cent in Norway and 10 per cent in Iceland (see, for details, Leick et al., 2023). Secondly, the Airbnb hosts include both individual households and commercial hosts with a registered business activity (for example, tourism companies or farmers), which show different profiles (Table 5). However, most of the properties are, indeed, linked to individual hosts, rather than companies. There are regional differences in this distribution of individual households and companies across the three case regions: properties let by companies represent 46 per cent of the Airbnb hosts in the Danish case region, but only 11 per cent in the Icelandic, and even 4 per cent in the Norwegian case regions. Among the individual households as hosts, there are both hosts with a single property let on the platform, and hosts letting multiple properties on Airbnb.

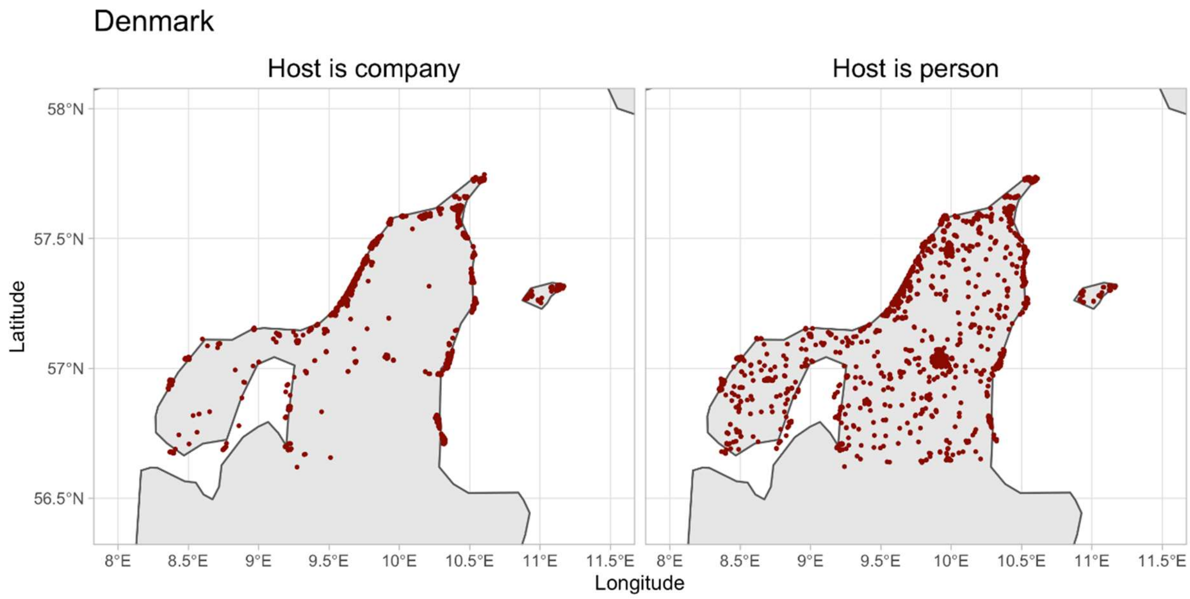
Table 5. Properties by host type (n=5,875)

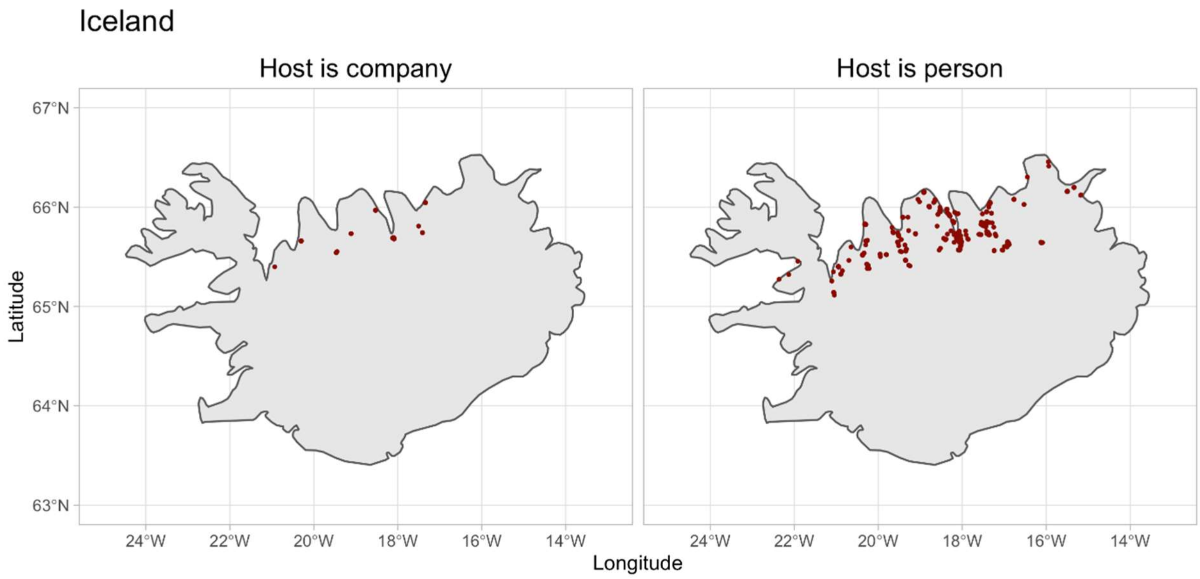
Host type	N	%
Large company	1,606	27.34%
Small company	137	2.33%
Individual w/single property	2,667	45.40%
Individual w/multiple properties	1,465	24.94%
Total	**5,875**	**100.0%**

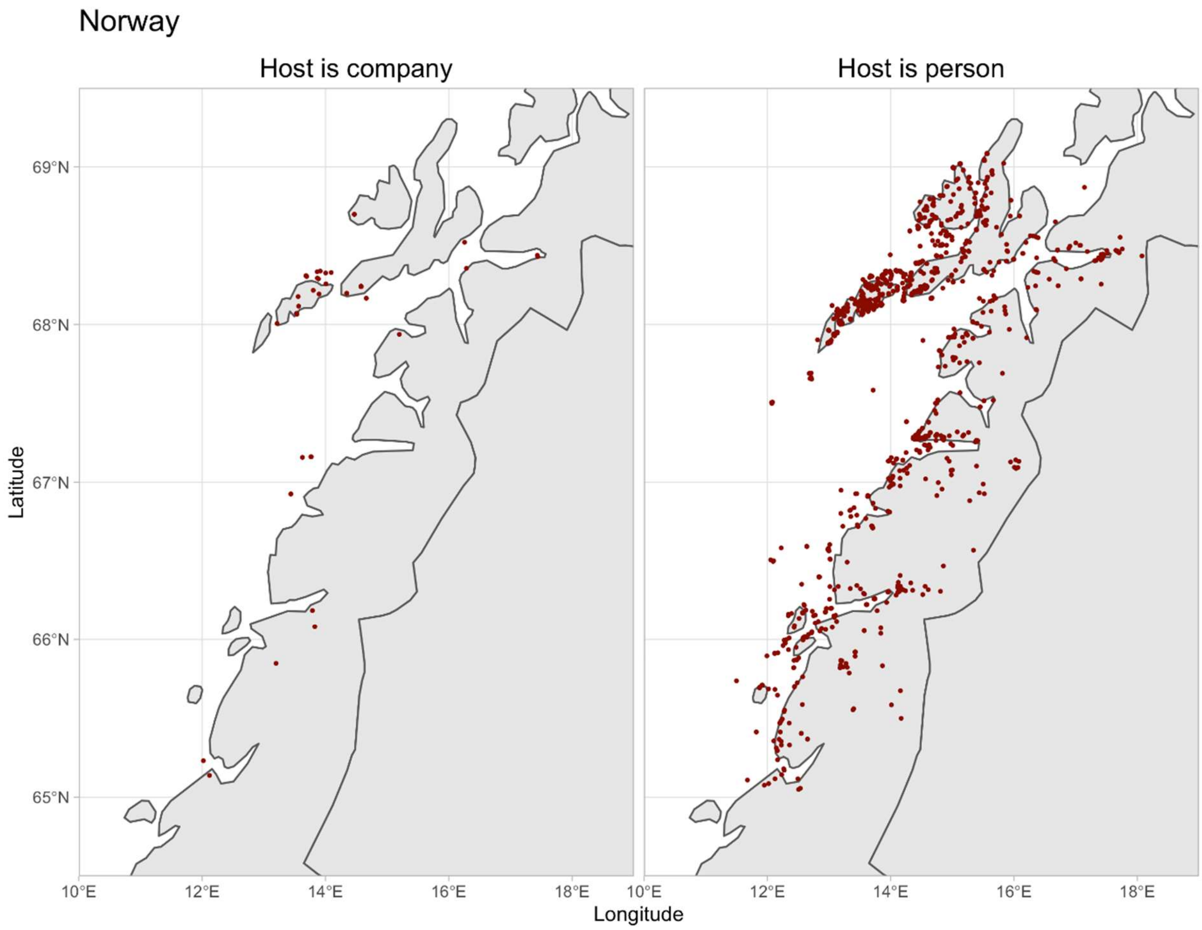
Source: Leick et al. (2023).

The properties offered by companies in the case regions (Figure 4) seem to be located in the key tourist destinations, for instance, coastal destinations, while the properties offered by individuals are more evenly distributed across the regions.

Figure 4: Map of Airbnb locations by host type







Source: Own illustration made with Natural Earth using Airbnb data in the sample regions. Published in Leick et al. (2023).

Furthermore, the performance of Airbnb hosts based upon their evaluation by past users through ratings and reviews was used to operationalise the hosts' present service quality in the eyes of the users (Lawani et al., 2019) and the future purchase intentions of users (Chen & Chang, 2018). Although the average host in all three sample regions has around the same amount of experience in terms of when the host joined Airbnb, there are more reviews for Icelandic Airbnb hosts, which may suggest a higher demand for properties in Iceland, or a higher popularity and success of Airbnb-based tourism in Iceland (Mermet, 2019), as well as entrepreneurial efforts by the Icelandic hosts. Please refer to Leick et al. (2023) for more details on the performance of the Airbnb hosts. Finally, according to the professionalisation and performance of the hosts, four different host profiles are derived for the case regions studied (Table 6).

Table 6. Host types identified in the three case regions

Host type	***Description***
Host type 1: Individuals (private households) with one property let on Airbnb	• Non-professionals according to the literature (Sainaghi & Baggio, 2021). • Achieves high performance scores in terms of reviews and ratings by past guests. • Does not want or is not able to develop into multiple-listing, more professional hosts. • Serves as an important carrier of guest satisfaction, based upon the performance scores achieved.
Host type 2: Individuals (private households) with several properties let on Airbnb	• Achieves lower performance scores than host type 1, measured through the reviews and ratings by past guests.
Host type 3: Small companies (e.g., family-owned tourism companies and farms)	• Their importance is reflected in the literature (Griggio & Oxenswärdh, 2021; Sagheim & Nilsen, 2021). • Uses the Airbnb platform as an additional promotional and distribution channel and benefits from relatively high performance scores (ratings) from past guest, when compared to host type 4. • Is evenly distributed across the case regions. • Represents the professional hosts according to the literature (e.g., Cocola-Gant et al., 2021).
Host type 4: Large companies (notably represented in parts of Northern Jutland, Denmark)	• Large tourism companies using the Airbnb platform as a promotional and distributional channel for tourism in some popular destinations. • Represents the professional hosts according to the literature (e.g., Cocola-Gant et al., 2021).

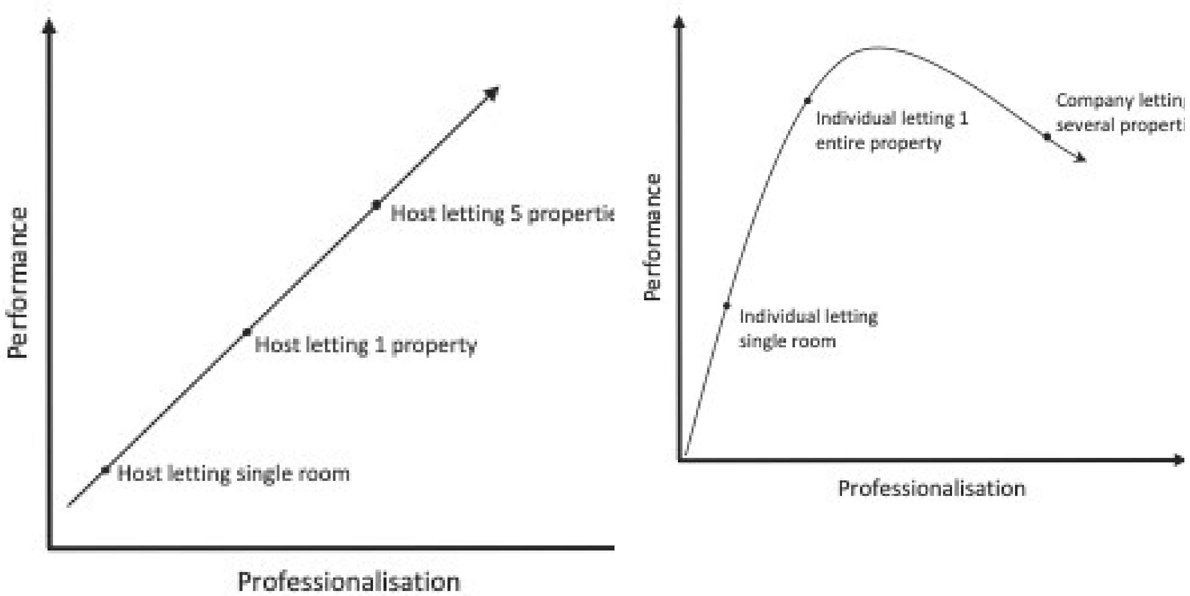
Source: Own illustration.

Based upon this observation, a non-linear u-shaped relationship between the quality performance and host professionalisation is proposed (Figure 5): initially, there is a positive relationship of less professional hosts and their service quality performance. A transition from a low to a moderate degree of host professionalisation will be associated with a better service quality performance, which corresponds to the linear relationship as supposed in the existing literature. However, as an Airbnb host becomes more highly professionalised and, in particular, as the host increases his or her number of properties as a commercial business, that is, the host is or becomes a larger corporate actor, the performance will begin to decline likely due the high costs (time, money, other resources) associated with maintaining a large number of properties.

Figure 5: Illustration of the hypothesised performance-professionalisation relationship

Relationship hypothesised in prior literature

Proposed relationship



Source: Leick et al. (2023).

2.6. Summary

The findings from the project stages point to the various entrepreneurial motivations of Airbnb hosts, particularly their wish to generate extra income, lifestyle entrepreneurship, and the role of social contacts. The hosts show heterogeneous socio-economic profiles; however, it seems that the lowest social *strata* in the rural communities do not participate in the Airbnb activities. Finally, according to professionalisation and performance considerations, it is possible to identify, at least, four different host types on the Airbnb platform in the three rural case regions under study. Finally, the relationship established between the professional management of properties by hosts and their performance in the eyes of past guests is important for tourism considerations, as it reveals which host types matter for what reason(s), and how these host types satisfy customer needs through their platform engagement.

Chapter 3: Airbnb Hosts and their Local Consumption

3.1. Research Question and Literature Review

Irrespective of the concrete host characteristics and profiles, all types of Airbnb hosts may have a positive role by re-distributing their additionally generated income from Airbnb rentals back to the local economy. It is, among other things, their consumption of the additional income that allows Airbnb hosts to produce positive spillover effects in the local economy and thereby support (directly or indirectly) economic development in the Artic rural regions. This consideration is rooted in input-output analysis of economic theory which models multiplier effects on economic variables through, for instance, additional income or, more generally, expenditure for the local economy (see, for example, Frechtling & Horváth, 1999). Such effects between markets, called spillovers (see Leick et al., 2024), can be assumed to exist for Airbnb hosts with their operations that are likely to affect the local economy.

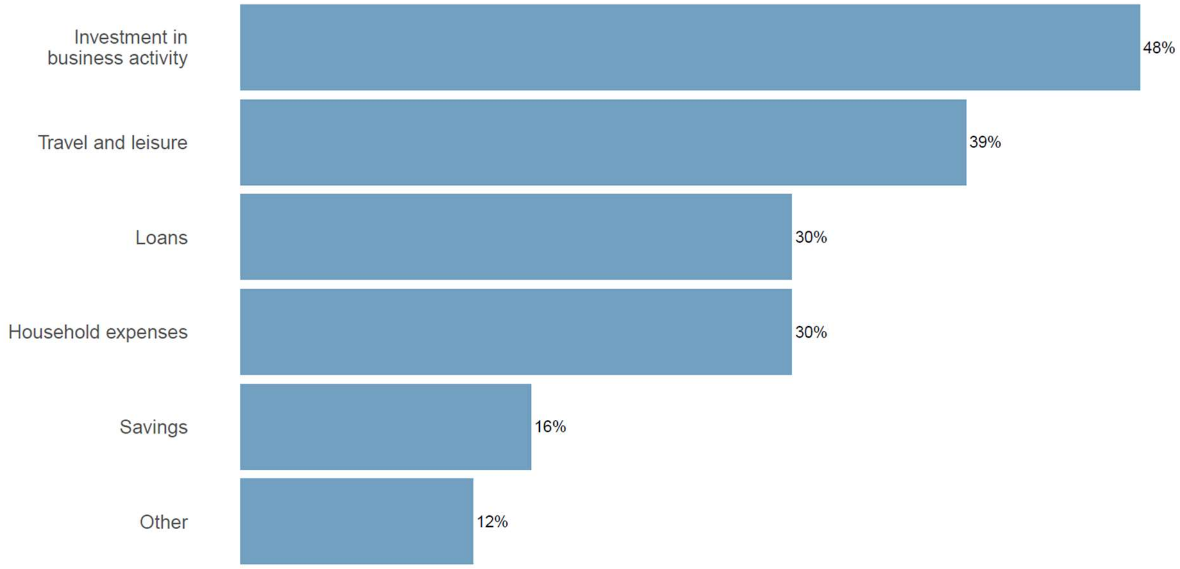
The intention to estimate the local consumption of the Airbnb-based income of hosts was an original goal of the project in 2021; however, during the project work, the focus was moved to the entrepreneurship of the Airbnb hosts and their impact on the development of sustainable tourism in the case regions. Thus, the consumption aspect remains a minor, and partly under-studied, topic in this project. Notwithstanding this, it remains an important issue to explore, as the literature seems to demonstrate that there is a link between the entrepreneurial engagement of individuals and their (local) consumption, which may benefit communities and regions; see, for example, the research on subsistence entrepreneurship from developing countries (Sridharan & Viswanathan, 2008). This literature shows that entrepreneurship may alleviate poverty by means of consumption. Hence, this represents a future research avenue in connection with social sustainability aspects.

This section investigates **Research question 2: What can be said about the consumption of Airbnb hosts in the three Arctic rural regions?** To answer the research question, part of the empirical work conducted in 2022 (see Table 2) was on their consumption.

3.2. The Consumption Patterns of the Airbnb Hosts

Concerning the question about how the spending of the income from Airbnb businesses was used by the hosts, the answers are various (Figure 6). 48 per cent of the Airbnb hosts use the Airbnb-generated income for investments in business activity, followed by 39 per cent of hosts using income for travel and leisure expenditure. 30 per cent of the Airbnb hosts use the income for either the payment of loans or household expenses. Only 16 per cent of the Airbnb hosts use the income generated on the platform for savings, and 12 per cent for other purposes. These results show that the Airbnb-generated income represents an important pillar of the hosts' support for their ongoing business activities and other non-daily-life expenses.

Figure 6: Consumption of Airbnb-generated income by hosts (multiple answers were possible)



Source: Own illustration.

3.3. Summary

The Airbnb-generated money is mainly used for local investments in businesses or for the payments of non-daily expenses or loans for, e.g., houses or cars. Although this result cannot be interpreted, given that only one question was used in the project to study the consumption aspect of Airbnb hosts, it provides an important future research avenue that should be investigated in more depth, notably when it comes to social sustainability aspects that matter for rural regions.

Chapter 4: Airbnb Operations and the Effects on Local Tourism Networks

4.1. Research Question and Literature Review

By acknowledging that Airbnb hosts are eligible actors in local tourism networks, this section investigates further whether, and, if so, how the Airbnb hosts are integrated in the tourism networks and what effects they have on the development of tourism in the Arctic rural regions. This part of the project studies the Airbnb hosts in a macro-level spectrum (see Table 1). Hence, **Research question 3** is the focus here: **What effects do Airbnb operations have on local tourism networks in the three Arctic rural regions?** As Airbnb activities impose both positive and negative effects, resulting in both acceptance and objections on the part of tourism-sector stakeholders, such as destination management organisations, tourism entrepreneurs, and regional planners, Research question 3 addresses the potential of Airbnb-related benefits for rural regions and aims to raise awareness of this potential through a constructive dialogue towards sustainable tourism development and planning in the Arctic and Nordic peripheral tourism destinations.

This exploration is informed by three important research gaps in the existing literature on Airbnb operations and Airbnb hosts. Firstly, both the impact and the role of Airbnb hosts in rural tourism are largely under-explored as research topics. From the literature on the more general topic of Airbnb-based tourism (see Balampanidis et al., 2021; Amore et al., 2022; Gurran et al., 2020; Mermet, 2019), it is known that, on the positive side, Airbnb can attract more and new types of travellers to the destinations, and support the establishment of a service infrastructure, and thereby the development of the destination. However, the presence of Airbnb has also led to some negative impacts, such as the crowding-out of regular rental contracts, the evasion of tax payments, rental price increases, and gentrification, a low degree of income distribution in the destination, and overly excessive tourism activities, notably during high seasons (see Balampanidis et al., 2021; Amore et al., 2022; Gurran et al., 2020; Mermet, 2019). It is important to note that these different effects have mostly been explored and documented for urban regions, while virtually no empirical studies address rural tourist destinations in particular (with the exception of Sagheim and Nilsen, 2021; Mahmuda et al., 2020; Falk et al., 2019).

Secondly, the global peer-to-peer sharing-economy platform Airbnb remains a blank spot in the literature when approaching the topic from the perspective of local-regional planning in rural regions. In particular, the question of how Airbnb might influence the functionalities of tourism markets through the roles of market participants and the local-regional planning authorities in a rural setting is under-explored. While there is some, albeit scarce literature about Airbnb and urban planning (Ferreri and Sanyal, 2018; Gurran, 2018; Gurran and Phibbs, 2017), a tourism development and planning perspective for rural tourist destinations is missing. Importantly, this scarce planning literature does not explicitly address Airbnb hosts. These two research gaps apply for both Airbnb-based tourism, in general, and the role of Airbnb hosts in rural destinations.

Empirical fieldwork was conducted in the first half of 2023, which involved a total of 20 actors from the tourism networks (Table 7): firstly, focus-group interviews were held as webinars (web seminars) with actors from the respective local-regional tourism networks (local-regional policy actors, tourism companies and Airbnb hosts) in the case regions. Secondly, individual follow-up interviews were conducted with selected representatives from the stakeholder groups. The follow-up interviews served as a supplement to the findings from the focus-group interviews with the aim of refining these findings or extending them in the event that new themes emerged in the interviews (for instance, interviews with Airbnb hosts with interesting profiles).

Table 7: Focus-group and follow-up interviews in the case regions

Interview type	**Number of interviewees**	**Total number of interviews**
Focus-group interviews	Iceland: 5 Denmark: 2 Norway: 8	15
Individual follow-up interviews	Iceland: 3 Denmark: 0 Norway: 2	5
Total number of interviewees		**N=20**

Source: Own illustration

A structured interview guide with open-ended questions was used for both the focus-group and individual interviews (Appendix 2). The interview questions were divided into four main themes: the positives effects of Airbnb, the negatives effects of Airbnb, Airbnb's role in local tourism, and the impact of Covid-19 on tourism in the case regions.

4.2. Airbnb Operations, Airbnb Hosts and the Tourism Network in North Iceland, Iceland

On 21 February 2023, the Icelandic Tourism Research Centre held a focus-group interview through an online webinar (web seminar) with 5 stakeholders in North Iceland, with representatives from 2 municipalities, 2 local tourism offices, and the destination management organisation (DMO) for North Iceland. Originally, 7 stakeholders had agreed to participate but 2 cancelled shortly before the meeting. The representatives came from: *Visit North Iceland* (DMO for the region), *Visit Akureyri*, *Visit Mývatn*, the municipality of Skagafjörður and the municipality of Fjarðarbyggð. Participants had been contacted by email explaining the project and the premise of the focus group. The meeting took 1 hour and 15 minutes, it started with a short presentation of the project and its results so far, before discussions among the participants were initiated. In the Icelandic region, additional interviews were conducted to validate the findings from the focus-group interview.

Focus-group Interviews

The Positive Effects of Airbnb

The focus group participants stated that one of the positive effects of Airbnb for the region of North Iceland was that it increased the possibilities for visitors to find accommodation while visiting the region. Airbnb can therefore strengthen North Iceland as a tourism destination by offering more accommodation options to the region.

Tourism in the region is picking up fast in 2023 after the Covid-19 pandemic, and there is such a great demand for accommodation that the tourism industry in North Iceland is having difficulty meeting it. Although there has been an increase in traditional accommodation offers (hotels, hostels, guesthouses) in recent years, the building of infrastructure does not happen overnight, and the participants see Airbnb as a solution to fill in the gaps, especially during the high season from June to August.

The participants also mentioned that Airbnb gives visitors a broader spectrum of accommodation to choose from and adds diversity. Not everyone wants to stay in a hotel; some are looking for cheaper alternatives, while others are looking to get closer to the locals' way of living. Airbnb gives tourist more options. The participants also stated that Airbnb can manage to "catch" tourists who are on self-drive tours around Iceland or in the region and can also be an incentive for tourists to stay overnight in places that otherwise do not offer many alternative accommodation options. Without accommodation options, tourists might not stop or spend money in smaller towns or rural places, but instead drive on towards more populated areas, such as Akureyri or other larger towns. The presence of Airbnb hosts can benefit other service providers in these less populated communities – such as restaurants, shops, and museums – and create opportunities for more local development.

The participants stated that Airbnb may therefore have a positive effect on local development, i.e., through the opportunity for extra income or job opportunities, which might stop people from moving away from rural areas. The participants state that Airbnb can be a tool for people to increase their income and start new businesses. However, it cannot happen in a vacuum, there is more that needs to come into play, and Airbnb service offerings is not a solution that everyone can do anywhere. There is also work that needs to go into incentivising people as to why they should stay in more rural areas, especially if the accommodation is not close to a tourist attraction or a more densely populated area. There needs to be a connection of accommodation provision with the tourism in the area, such as interesting places to visit or other places providing services to tourists. Notwithstanding this, the participants see Airbnb as more of an opportunity to earn extra income, rather than Airbnb becoming a full-time job.

The Negative Effects of Airbnb

While rural communities can benefit from an increase in tourism, they are also interested in getting more people to settle and live in these communities. The villages in North Iceland are battling a lack of properties for people either to buy or to rent to live throughout the year, and, in many places, there are no new developments, such as house-building projects, in progress. So, the pool of houses and apartments available is limited. Thus, it becomes a question of what would benefit the communities and municipalities more: more tourists or more inhabitants. The participants stated that one of the negative effects with Airbnb operations may be that Airbnb rentals take homes away from the locals, with investors or second-home owners putting properties into short-term rental. It might limit the opportunities for locals to establish themselves within their own communities. In particular, young people and families, who are trying to move away from home or buy their first property, might be limited due to Airbnb.

The municipalities in North Iceland are also not obtaining a lot the taxes from the income generated by Airbnb rentals, as many of the homeowners or property managers live in other regions of Iceland (mostly in the capital region). Therefore, the benefits to the municipalities are not necessarily great. The 90-day rule in Iceland for Airbnb rentals, which states that Airbnb rentals are possible without any special licencing or business certification if the properties are rented out for a maximum of 90 days per year, also means that it can be beneficial for investors outside of the region to buy a property and only rent it out for 90 days per year, and then let it sit empty for the rest of the year. This can have a negative effect when municipalities are trying to attract more people to the area to live and work throughout the entire year and also need homes for locals.

If the growth of Airbnb is too exponential in a community, it can also change the dynamics within that community. In rural areas and small villages, in particular, it has an effect when you walk around your neighbourhood and meet a lot of people the locals do not recognise, or when locals do not know who is staying next door. The effects can also be detected in larger towns, as Airbnb rentals drive tourists into residential areas in greater numbers than more traditional forms of tourism activities. This can lead to an increase in disturbance or problems due to increased traffic, people coming and going at all hours, less parking spaces available, etc. Thus, it can be said that a disproportionate amount of transient people in a small community can have a negative effect on the people's sense of place and its 'ownership' of certain public places.

Finally, participants stated that Airbnb may pose unfair competition to more traditional forms of accommodation (hotels, guesthouses, etc.) or to people who make a living from offering accommodation to tourists throughout the year.

Airbnb and the Tourism Sector

The stakeholders see Airbnb hosts as a supplement to tourism but not necessarily as a part of it. The hosts are seen as a hidden link in the chain in many ways, and the focus-group participants felt that Airbnb hosts do not directly participate in local tourism, planning or development. This is, in part, due to the difficulties of reaching out to the hosts, and also the fact that Airbnb hosts never initiate contacts with the tourism offices or the DMO themselves. Airbnb hosts do also not present themselves at meetings held for tourism actors in North Iceland. Hence, the stakeholders feel that they lack an oversight of who they are, how many they are and how they operate.

Airbnb and the Impact of Covid-19 on Regional Tourism

It is the opinion of the participants that the number of Airbnb rentals decreased during the Covid-19 pandemic. Many smaller guesthouses and property owners took their properties off Airbnb during the pandemic and put them into long-term rentals. However, they do not believe that the effects of Covid-19 will be permanent, and, once the international tourists return, the Airbnb market will grow again in the region. They are already seeing this happen in Akureyri, where properties which had previously been taken off the site are now being listed there again.

Individual Interviews

Three (3) additional individual interviews were conducted as follow-up interviews after the focus-group meeting. The interviewees were an Airbnb host, a travel organiser, and a hotel manager. Potential interviewees were contacted by phone and asked to participate in the study and to schedule a time for the interviews to take place. All three interviews were conducted over the phone in March 2023.

Hotel Manager (Húsavík)

The hotel manager stated that Airbnb operations in the Húsavík area do not have an impact on his/her business and he/she does not view Airbnb hosts as direct competition. This is, in large part, due to the services that the hotel provides, which are different from those offered by Airbnb hosts; moreover, the hotel services appeal to a different clientele. The hotel manager also stated that he/she does not have trouble housing his/her staff during the high season, because the hotel owns a property with 25 rooms that it can use for its staff. However, he/she knows that the hotel is in a unique position in this regard, as other tourism businesses in the area have found it difficult to find accommodation for their seasonal staff. The interviewee stated that, to his/her knowledge, Airbnb is not a big player in Húsavík, especially since the municipality put guidelines in place for those who seek to obtain permits to rent out homes to tourists beyond the 90-day rule.

Airbnb Host (Skagafjörður)

According to the interviewee, Airbnb accounts for perhaps 20 per cent of their guests. This Airbnb host is a company that offers both accommodation and other services geared towards tourists, such as horseback tours. The company uses a variety of platforms, and Airbnb is only one of them. The Airbnb platform is preferred by the company because it offers a more direct communication with the guests. The interviewee stated that they also liked the option of giving the customers feedback at the end of their stay, not just the other way around, even though this meant a bit more work than other bookings. They believe that this system of double feedback is the reason why tourists who book through the Airbnb platform are generally tidier and more engaging than tourists that book through other platforms such as Booking.com.

Travel Organiser (Grímsey)

The interviewee runs a travel agency that specialises in organising trips to the island of Grímsey, which is a part of the municipality of Akureyri and lies about 40 km off the coast of North Iceland, with around 60 inhabitants. According to the interviewee, the majority of tourists that come to the island are there on day trips and do not stay overnight. However, there are three guesthouses located on the island, and the interviewee only knows of one property being rented out through Airbnb, which is a recent thing. Airbnb activities, as of today, do not affect his/her tourism business in Grímsey but might do so in the near future if there was a sudden rise in the number of Airbnb properties. The agency offers a variety of guided tours, and its customers have different needs. In the past, the agency has had enquiries from customers about renting houses for a few weeks during the summer, as they want to experience being a part of the small island community. Hence, there is some interest on the part of tourists visiting the island. Personally, the interviewee is not against Airbnb in principle, but would not necessarily want an increase in Airbnb activities on the island. Housing is a big issue in smaller communities like this, and the interviewee would prefer to see the housing that is available be used by people who want to live on the island, rather than for temporary letting. When asked if he/she views Airbnb hosts as part of the local tourism, the interviewee was not very sure. From what he/she knows of the Airbnb hosts in North Iceland, he/she views the hosts more as a form of landlords renting out properties, rather than tourism actors.

Picture 1: Horse-related tourism in North Iceland, Iceland

Source: Visit North Iceland.

4.3. Airbnb Operations, Airbnb Hosts and the Tourism Network in Northern Jutland, Denmark

On 17 May 2023, the IER (Department of Entrepreneurship and Relationship Management, IER) held a focus-group interview with a webinar (web seminar) with two (2) stakeholders in Northern Jutland, representatives stemming from two (2) destination offices of Northern Jutland in Denmark. Originally, four (4) stakeholders had agreed to participate but two of them cancelled shortly before the meeting. The participants had been contacted by email explaining the project and the premise of the focus group. The meeting took one hour, and it started with a short presentation of the project and the results achieved to date. Touching up on that, the discussion was started. The representatives came from two organisations: *Destination Himmerland* (interviewee 1), and *Destination Nord* (interviewee 2).

Focus-group Interviews

The Positive Effects of Airbnb

Airbnb is not viewed very critically by the interviewees, but rather seen as a requirement for growth. Interviewee 1 does not see any problems with a growing offer of Airbnb-based accommodation in the market. It is argued that Airbnb currently contributes a lot to the growth in tourism and supports regional development. There is no fear that Airbnb would have a huge negative impact on the price level of accommodation in general in the region, meaning that other accommodation providers would have to set prices much lower due to the enlarged offer through Airbnb.

The interviewees both emphasis that there are more pros than cons regarding the growing presence of Airbnb in the region. Airbnb is important to increase the amount of accommodation offers for tourists visiting the region. Interviewee 1 cannot identify any negative effects, for example, on housing prices because Northern Jutland is a rural area. During the high season (e.g., in July), all accommodation providers in the region are fully booked, but, during the rest of the year and off season, more visitors are needed. This is why Airbnb is a good product to bring some of the target groups to Northern Jutland, people who like the local way of living, like to meet locals, and like to get the feeling of the beautiful places in Northern Jutland. Interviewee 1, moreover, reports that Airbnb keeps the level of competition up so that other accommodation providers need “to keep on their toes” and render their accommodation attractive for tourists. Beyond the potential of contributing to the regional growth of the tourism sector, the interviewees also see the additional income for regional people through Airbnb as another positive effect.

The Negative Effects of Airbnb

Even if the positive effects were highlighted more than the negative effects, interviewee 2 mentioned a few difficulties regarding Airbnb. He/she knows a few actors in the tourism business of the region who are worried about the price level. Interviewee 2 argues that it is only very few weeks during the year when the maximum capacity can be used. Thus, he/she does not recognise the risk for overly excessive tourist activities for the region, but some businesspeople from the hotels are afraid that the growing offers from Airbnb hosts would have an impact in terms of declining price levels for the hotels. However, during the last years, these hotel managers have learnt that the effect is very marginal, because the target groups of hotels and Airbnb bookings are quite different. Beyond the issue of the price level, which may be a negative effect, another negative effect acknowledged by the interviewees is that

Airbnb hosts have their own rules, compared to other accommodation providers, which is viewed as critical.

Furthermore, what was mentioned as a problem related to Airbnb was the difficulty to get together and start co-operation with the Airbnb hosts. Such co-operation would be beneficial for supporting regional development and organising a sustainable tourism growth strategy for the region. Collaboration across various sectors and regions was viewed as being part of the Danish culture. Interviewee 1 mentioned a forthcoming project with participants from all the 19 Danish tourism destinations. He/she hopes that this project helps to shape a hub for Danish tourism. In summary, it was recognised by the interviewees how difficult it was to identify Airbnb hosts and get in contact with them.

Airbnb and the Tourism Sector

The stakeholders see Airbnb hosts as having big potential for complementing the tourism sector. The fact that there are extra rules and that there may, at some point, be a negative impact on the price level of hotel rentals is viewed critical but not recognised as a big threat. More collaboration with the stakeholders is viewed as a requirement for fully exploiting the potential of Airbnb to contribute to a sustainable growth of the regional tourism. Interviewee 2 stated that it could, perhaps, become a problem, given that there is no statistical information available from Airbnb, while big hotels (if they rent out more than 40 rooms) are listed in the Danish statistics.

Airbnb and the Impact of Covid-19 on Regional Tourism

At the beginning of the Covid-19 pandemic, people were somewhat critical as to whether the Airbnb home could deliver the same standards as hotels could do in matters of hygiene. The Covid-19 pandemic is now viewed as being over, and it was stated that the business would now be back to normal. It was not estimated that Covid-19 would have disrupted or changed the business essentially.

Picture 2: Beach landscape in Northern Jutland, Denmark

Source: Steen Bo Frandsen.

4.4. Airbnb Operations, Airbnb Hosts and the Tourism Network in Nordland, Norway

USN in co-operation with Nordland Research Institute organised a focus-group interview as a short online webinar (webinar) with project participants invited from Nordland, Norway, on 9 March 2023. A total of eight (8) participants who were representatives of local and national business and tourist associations and destination management organisations (e.g., *NHO*, *Bodø Næringsforum*, *Visit Helgeland*, and *Nordnorsk Reiseliv*), private companies that operate as Airbnb hosts or tourism operators, and local municipalities (the municipality of Flakstad). The participants had been contacted by email explaining the project and the premise of the focus group. The meeting took 1 hour and 30 minutes, it started with a short presentation of the project and the results to date, before discussions among participants were initiated. Two individual follow-up interviews were conducted shortly after the webinar had been held.

Focus-group Interviews

The interviewees were surprised to learn that, in Nordland, the percentage of professional actors among Airbnb hosts is only about 4 per cent, because they thought it would have been much higher. According to the experiences of the interviewees, it is notably the professional tourism actors, who operate in the region on several platforms, e.g., Booking.com, Expedia.com, or Airbnb. For the tourism stakeholders interviewed, all these platforms that are represented in their region have the same platform-based business model, which is the reason why some interviewees talk more generally about the "platform business model" in the following.

The Positive Effects of Airbnb

The benefits from Airbnb were acknowledged from several interviewees who represented different domains in the tourism network; these benefits are mainly related to the development of not-yet developed tourist destinations, tax income for municipalities, more environmentally-friendly tourism through longer stays, and the attraction of additional or new travellers to the regions. However, the interviewees stress that, taken together, the downsides of Airbnb in their region outweigh the upsides, even though they acknowledge these benefits.

The Airbnb host among the interviewees reports that they rent out a total of 13 housing units through Airbnb, which is embedded in 50 housing units in the entire municipality, ranging from small apartments to entire detached houses (villas). They state that they contribute to offering housing to, e.g., not only temporary workers, and refugees, but also tourists visiting the area.

They organise furnished housing space, so that residents or visitors have a high level of comfort. One benefit is that Airbnb hosts offer tourists and other individuals searching for short-term rental a feeling of “being at home”, which is not the same as being in a hotel, for instance. This interviewee, furthermore, underlines that guests booking on Airbnb are regularly returning to the destination, and hence, the Airbnb hosts create a strong customer relationship. The Airbnb host among the participants, moreover, highlights that, for families and small groups who visit the region, renting an entire house through Airbnb can be seen as an opportunity. These tourists prefer to be independent, they do not need the reception in a hotel or a restaurant close-by and choose self-catering instead. In the region, however, there are only very few professional accommodation providers that offer such services; hence, these travellers prefer Airbnb, which allows them to rent the type of property (house, apartment, second-home cottage) that suits their needs.

This interviewee, i.e., the Airbnb host, also stresses that some guests use Airbnb to test out the local environment, and that it can be a first test before they re-locate to the region. By this token, the host contributes to attracting new residents to the peripheral regions. This interviewee also underlines that Airbnb hosts want to co-operate with the official tourism actors because it benefits the guests when they receive official information on the touristic sites and activities that they can book in the region, for instance, through leaflets. It can be seen as another benefit that the hosts are willing to act as part of the tourism network.

Furthermore, the interviewee representing the public municipalities in the region stresses that the higher tax income through Airbnb is positive as the municipalities reach higher levels of value creation, so that they can develop the destination. However, one challenge is that short-term rentals through the platforms are not included in the official strategies for local tourism that municipalities establish. In particular, it is difficult to reach out to the Airbnb hosts, as the municipality does not know who they are. The municipality wishes to have them on board in order to create higher value for tourist attractions with their help.

The more rentals a municipality has for incoming tourists and the more houses are let to people, the more maintenance of existing houses takes place and the higher the chances that the municipality obtains new services are, such as hairdressers, a pharmacies, cafés or restaurants. This is very positive for the municipality. For Airbnb guests, the local groceries benefit because guests typically use self-catering during their stay. Hence, Airbnb rentals are better than only limited tourism during the high seasons. However, the challenge is to obtain an overview of the Airbnb hosts and understand how to reach them (some of them live far-away from the Northern Norwegian tourist destinations). This is also a reason why the hosts are not part of the local planning when it comes to installing new public toilets, new infrastructure, etc.

Furthermore, some interviewees mention that it is better to have a holiday home or an abandoned home rented out through Airbnb than keeping it abandoned, as abandoned houses have a negative effect on the quality of life in the region. People then invest in the houses that they wish to rent out as Airbnb hosts. Another interviewee states that Airbnb can be a great “tool” for underdeveloped tourist regions to attract visitors and kick-start the development of tourism. Interestingly, the Airbnb host among the interviewees stresses that the host is worried about being viewed as a competitor to the local hotels because they do not want to be a direct competitor. Instead, they wish to collaborate with the local hotels and accommodation providers, e.g., to attract more guests through websites. For the Airbnb host, it is important to underline that they do not rent out for a day only but have a minimum booking for guests for 3 consecutive days, which differentiates them from hotels. This interviewee stresses that the Airbnb hosts wish to contribute to the development of the tourist destinations in order to attract more travellers to the region.

Another interviewee states that during the Covid-19 crisis, Airbnb took on a positive role as it served as a buffer to attract tourists to the (seemingly) “safer” private homes. Finally, the interviewees highlight that Airbnb guests have longer stays, and that such longer-term rentals (e.g., a week or longer) are positive for the environment and the combating of climate change, as compared to very short stays by tourists.

The Negative Effects of Airbnb

The interviewees representing the municipalities and business associations report that the sceptical attitude of accommodation providers and tourism companies concerning Airbnb is not necessarily caused by their fear of competition. It is instead related to the issue of taxation and a lack of knowledge of short-term rental companies, which makes it hard for tourism actors, notably the municipalities, to understand the quantity of Airbnb hosts in their area. This, in turn, influences their planning for, e.g., public infrastructure and transport, notably for the high seasons. As an example, traffic is a big issue during those high seasons. Airbnb renders this intensive tourism more unpredictable during the high seasons. Moreover, unregulated visitors are an economic burden on municipalities because they have to plan facilities for the given number of inhabitants. However, the interviewees also stress that they have a responsibility to welcome all visitors to a certain extent, and the income generated through tourism is welcomed. Nevertheless, the infrastructure development is critical, and here, the municipalities do not have sufficient control when it comes to platform-based rentals. Given the restricted economic situation, achieving more control over the unregulated market can go at the expense of, e.g., local welfare duties.

Another challenge or negative effect, according to the interviewees, is that, in the highly-visited areas on the Lofoten, the hotels are unable to find any housing space for their own (temporary/seasonal) staff because there are too many tourists renting out houses. This indirectly affects the chances for local employers to fill their workplaces and thus improve the employment situation in these municipalities.

Another interviewee, representing the tourism companies in the region, stresses that the entry barriers for hosts to become an accommodation provider on the platform – be it Airbnb, be it booking.com – is low. This type of platform-based accommodation provision can be good in areas in which the infrastructure of destinations is not yet well developed, as it can contribute to such infrastructure development. However, in areas in which there is already a well-established infrastructure (e.g., in some villages on the Lofoten Islands, such as Svolvaer), platforms such as Airbnb benefit from the efforts and investments that other tourism actors have undertaken and "surf" as a kind of free-rider on the previous investments of local businesses. It then leads to development as in big cities, for instance, Barcelona, or Reykjavik, in which residents feel uncomfortable living there because of too much tourism in the residential areas. Because of this development, Airbnb should be regulated at local level, which, however, proves difficult.

This interviewee anticipates that the situation will aggravate in the future; according to the experiences of the interviewee, only few Airbnb hosts now rent out to secure their household incomes. However, given the deterioration of the Norwegian macro-economic situation, e.g., the increase of the interest rates for loans financing own housing space, it is likely to expect that more house-owners will – in the near future – attempt to safeguard their private income through Airbnb rentals. This will represent a challenge in the destinations that have already an established tourism infrastructure, because it cannibalises the efforts made by commercial tourist companies through their previous investments in the region. Several interviewees point out that such investments will not pay off anymore, traditional accommodation providers might withhold from investing, and manifold micro-entrepreneurial households will replace a stable infrastructure. The challenges anticipated include a lack of safety in the residential neighbourhoods, a loss of predictable salaried income, and a fall in the quality of life outside the cities. These challenges are seen as a result of the platform-based sector being not regulated. The challenges can also have negative effects on the local infrastructure, for example, fire warning systems or hygiene, according to the interviewee.

In addition, employers in the accommodation industry have trouble finding housing space for their employees, which, again, will increase hotel prices, as hotels will have to build or buy housing space for their employees. This might lead to a downward spiral caused by an unregulated market (a clash between hotels that plan to build long-term strategies and invest accordingly and unpredictable "wild" private rentals through platforms).

From the perspective of the Airbnb host among the interviewees, one challenge is that there is little or no communication between the host community and between the hosts and the tourism network in the area. More communication would be helpful to achieve a better distribution of housing space in the area. In addition, guests in Airbnb-rented homes would benefit from information on activities and attractions in the destinations, which would require more communication and a better integration of Airbnb hosts in the local tourism network.

Another challenge reported by several interviewees is that professional tourism actors or businesses that use Airbnb as a distribution channel are only a small number among the huge number of hosts in the region. Since these hosts could make a difference in marketing the destination, however, they are only marginally represented on the platform. Most hosts are therefore not part of nor contribute to regional marketing efforts, while most tourism actors (e.g., hotels) invest time and effort in planning marketing strategies that benefits the entire region. This is a negative externality because the Airbnb hosts surf as free-riders.

In total, the negative issue with Airbnb hosts is the lack of knowledge and lack of regulation. Currently, the total percentage of Airbnb hosts is still low in the region, but, if it continues to grow, negative effects are to be expected in the future. Because of the missing or insufficient regulation of Airbnb hosts and Airbnb operations at local level, the municipalities do not have any opportunities for control or sanctions (e.g., there has been a case of unregulated prostitution taking place in Airbnb-let houses). Many interviewees seem to agree that a registration duty for Airbnb hosts could be a solution and would allow municipalities to have knowledge of who the hosts are in their region.

Airbnb and the Tourism Sector

Airbnb is not primarily seen as a competitor to the tourism industry in the case region, but the negative effects on other markets and the lack of information on hosts and the lack of co-ordination on the part of the planners are issues that the interviewees acknowledge. Also the Airbnb host among the interviewees reports that there is a wish not to be seen as a competitor to the other accommodation providers and to have more co-ordination for tourism activities.

Airbnb and the Impact of Covid-19 on Regional Tourism

The issue of Covid-19 was not addressed by the interviewees in the focus-group interview, except for the fact that, during the Covid-19 years, the rural regions, including the Nordland region, were seen by travellers as the safer destinations. Local accommodation providers, including Airbnb hosts, benefited from this trend.

Individual Interviews

Real-estate Property Company with Rental Activities, including Airbnb Operations

The manager from the local real-estate company that is active as an Airbnb host reports that they have been a so-called Superhost for several years and had received many good ratings and reviews from guests. Besides the properties that the company rents out on Airbnb, more properties are rented out through other channels, such as their own website, social media channels such as Facebook, Instagram, and through word-of-mouth. The properties rented are different, including apartments, houses, and second-home cottages. The manager states that they prefer platforms such as Airbnb that allow direct contact with the guests and obtain information about why they book with the company and visit the region. The guests are both domestic and international travellers. For the properties on Airbnb, a minimum stay of two to three nights is a pre-requisite, but the company prefers bookings with a longer duration (such as a week). The company does not see itself as a competitor to local hotels and/or other accommodation providers, because what they offer is different from what hotels offer. The company is one of the biggest commercial actors on Airbnb in the region, but they stress that they also offer housing space to other groups – not through Airbnb (e.g., refugees, seasonal workers, and other groups seeking medium-term properties to rent). The manager emphasises that Airbnb is important to render the region more attractive.

Regional Representative of a Destination Management Organisation (DMO) in Northern Norway

The interviewee refers to the discussion of the webinar held on 9 March 2023 and stresses that the situation on the Lofoten Islands cannot be entirely compared with other parts of the Nordland region. The Lofoten Islands have experienced a boom in tourism, which attracted both new investors in tourism and Airbnb-based tourists to the islands. As a DMO, the marketing activities of the interviewee's organisation promote part of the Airbnb offerings if the hosts wish this. He/she also reports that, according to his/her observations, an increasing share of the incoming tourists do not want to stay in a hotel. The interviewee also underlines that Airbnb has overall been positive for the Nordland region and developed into an important tourism actor. Hotels in the region also use the Airbnb platform. The increase in accommodation capacity because of Airbnb is important, according to the viewpoint of the interviewee, because the hotels may face seasonal shortages. In addition, families and tourist groups prefer Airbnb to hotels. Some Airbnb hosts also rent to tourists and other groups, which results in a multiple-use model of the hosts. Airbnb has also contributed to the renovation of old fishermen's houses in the region, which improves the attractiveness of some coastal fishing villages. In terms of the negative effects, the interviewee confirms that he/she has not experienced any negative effects for the region for which he/she is responsible. An exception is the registration of Airbnb guests, which is a challenge which, however, could be tackled by means of a local tourist taxation that includes a guest registration charge.

Picture 3: Henningsvær, Lofoten Islands, is one of the key tourist villages in Nordland, Norway

Source: Birgit Leick.

4.5. Summary

The following common patterns were observed in the interviews conducted:

With regard to the positive effects of Airbnb in the three Arctic rural regions, which are linked to opportunities for the local tourism network, it has been found that, with their operations, Airbnb hosts fill a gap in the local tourism infrastructure and complement this infrastructure. Moreover, the Airbnb hosts do not seem to represent direct competitors to other important accommodation providers, at least if the current demand for tourism is maintained.

Furthermore, the Airbnb hosts have a positive effect by maintaining and renovating their properties in remote or rural regions. This enhances a positive image of the rural destinations that perhaps have suffered from outmigration and a decline in industry. Finally, and, perhaps, most importantly, the Airbnb hosts act as a growth engine and help to combat the seasonality in the Arctic rural regions.

With regard to the negative effects of Airbnb in the three Arctic rural regions, which are linked to threats or challenges for the local tourism networks, there is a lack of knowledge on the part of local and regional tourism stakeholders (e.g., DMOs) and the regional planners with regard to the Airbnb hosts. This results in a lack of communication between the Airbnb hosts and the local tourism networks as well as a lack of co-operation between these actors. Hence, the Airbnb hosts are not really integrated in the local tourism network. The fact that the Airbnb hosts are not included in the local/regional tourism planning, while other stakeholders (such as tourism companies) are included in these planning schemes, also creates some feelings of unfairness in the local tourism network: the Airbnb hosts, who benefit from the presence of a mostly unregulated global platform, are viewed as free-riders undertaking no or only low levels of investment in the region. Another negative impact is found on the local housing markets, particularly in North Iceland and Nordland, as seasonal workers in the tourism sector and other industries face shortages of rental housing space.

However, there are important structural differences between the case regions. Iceland, including North Iceland, is an entrepreneurial society, and business owners tend to develop business opportunities, including Airbnb operations, actively. Airbnb activities in North Iceland are viewed positively for the local tourism network, although the downsides are nonetheless acknowledged. There are also well-developed tourism activities in Nordland, Norway, and Northern Denmark. In the Norwegian case region, different stakeholders point to excessive tourism and housing-market challenges during the high season as a major threat, which requires local or regional regulation (for instance, through taxation). Another problem is that, both in the Icelandic and Norwegian case regions, there are many second-home owners among the Airbnb hosts, and the communication and co-operation with them is difficult for local stakeholders in the tourism network (such as municipalities, or DMOs). The Northern Jutland region in Denmark is a well-established tourism region, and Airbnb operations represent a minor threat to the local tourism network there.

Chapter 5: Main Conclusions and Policy Implications

5.1. Main Conclusions

Conclusion no. 1

Airbnb hosts in the Arctic rural regions represent a broad group of both individual households and commercial companies with different profiles. Four types of hosts are emerging from this project with different profiles regarding their professionalisation and performance. It is important to note that this number of Airbnb host profiles might not be comprehensive, and there might be more profiles to be investigated. The four Airbnb host types in the Arctic rural regions include private households with either a single or multiple properties as well as commercial actors, such as small- and medium-sized and large companies. These hosts score differently in the eyes of the Airbnb users. Hence, the Airbnb hosts in the case regions are not a homogeneous group.

Conclusion no. 2

The socio-economic profiling of the Airbnb hosts interviewed suggests that somewhat middle-aged or older, middle-/high-income, well-educated, employed and self-employed Airbnb hosts operate in the Arctic rural regions, while other socio-economic profiles (e.g., low-income households, or students) seem to have less opportunities to use the platform. This finding is not surprising, given that the platform engagement requires property to rent out on a short-term basis. Most of the Airbnb hosts have been operating for several years on the platform, and they tend to operate the whole year, not just during the high season. Most of these Airbnb hosts rent out single properties as entire houses or apartments. Their key motivations are the earning of extra income, lifestyle considerations, and social contacts.

Conclusion no. 3

Concerning the effects of Airbnb hosts on local tourism networks, there are both positive and negative effects. One key positive effect is that Airbnb operations can enhance rural tourism growth in the case regions, particularly in regions with a lack of sufficient accommodation facilities. Airbnb operations also attract tourists to less-developed destinations and help to combat the challenges of seasonality in tourism. One major challenge is the lack of integration of the hosts in the existing tourism networks, which begins with identifying the Airbnb hosts and communicating with them on the part of regional planners and tourism stakeholders. While it remains unclear, within the framework of this project, whether the regional tourism stakeholders would be willing to integrate Airbnb hosts into their planning (such as booking systems), it can be stated that there is only a low degree of co-operation between Airbnb hosts and local tourism-network stakeholders. The major negative effects identified point to a need for the regulation of Airbnb operations at regional level.

5.2. Implications for Public-policy and Contribution to SDGs

The key public-policy implications are:

1. Lower social layers of society in Arctic rural regions do not seem to benefit from this low-cost opportunity to entrepreneurship. This calls for further research on the inclusion of socially-disadvantaged groups in society on Airbnb, such as low-income private households in rural regions.

2. Furthermore, a systematic effort is necessary in Arctic rural regions to obtain a comprehensive overview of Airbnb-based offerings and to open communication channels between the Airbnb hosts and local tourism networks. Since Airbnb-based offerings are an important tourist activity in these regions, regional planning authorities and other tourism stakeholders, such as DMOs, can benefit from more communication and co-ordination.

3. As another policy recommendation, the issue of the regulation of Airbnb operations at regional level should, at least, be discussed in order to investigate whether regulation will support the goal of better co-ordination of Airbnb operations with general tourism in the Arctic rural regions.

This project contributes to knowledge generation about several SDGs prioritised by the Arctic Co-operation Programme:

1. As the global sharing economy provides new opportunities for the regional organisation of work and entrepreneurship, both private households and companies in the Arctic rural regions can utilise these novel opportunities both beside, or as a substitute for, “regular”, and full-time employment. Thereby, their operations as Airbnb hosts in the Arctic rural regions may support the achievement of decent work and economic growth (SDG #8).

2. The engagement of hosts on the Airbnb platform demonstrates the entrepreneurial aspirations and innovative potential of residents in Arctic rural regions. Various host types can be empowered to improve their income situation and develop business opportunities, even though this might be limited to small-scale or micro-entrepreneurship for private households (SDG #9). Commercial actors, i.e., regional companies, may expand their existing business operations on the platform Airbnb (SDG #9).

3. The engagement of Airbnb hosts is not yet well-embedded in the existing network relations within the tourism sector in the Arctic rural regions, but the development of communication channels and co-operation opportunities between the Airbnb hosts and local tourism networks represents an important goal that supports, notably, new ways of peer-to-peer, business-to-business and citizen-to-government relationships (SDG #17, partnership).

5.3. Future Research Avenues

In brief, some avenues for future research that can be derived from the project results are as follows:

- The profiling of Airbnb hosts in rural regions needs further investigation;
- The motivation of commercial actors, such as tourist companies, to operate on the platform should be studied in more depth;
- The consumption patterns of Airbnb hosts at local level deserve further attention;
- The user perspective of tourists using Airbnb in the rural Arctic regions should be included in future studies;
- Sustainability aspects, notably social sustainability, with regard to Airbnb operations and Airbnb-host activities should also be studied in future research.

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Appendix

Appendix 1: Interview questionnaire for the phone interviews with selected Airbnb hosts (see Table 2)

A comprehensive questionnaire with mainly closed questions was used to guide the interviews and conduct them in an efficient manner. The guide was composed of several sections: the first section asked for socio-economic background information (gender, age, educational level, employment status and income level), which was followed by the second section devoted to the Airbnb listing activities (e.g., duration, season, efforts put into professional management, stressfulness of the listing management, and service provided on other digital platforms). The third section focused on listing and locational attributes as well as the users, and the fourth section on the entrepreneurial characteristics of the hosts. The final section explored both the local consumption patterns of the hosts and their integration in the local tourism network. The collected data were analysed by means of descriptive statistics. Prior to the survey, the data collection was approved by the Norwegian authority SIKT, and it was declared that this research is in line with the Norwegian guidelines for data protection and research ethics.

Section 1

1. Please enter your gender: Female ☐ Male ☐ Other ☐

2. Please enter your age: ☐☐

3. Which is the highest level of your education?

   Primary school ☐
   High school ☐
   Professional education ☐
   Bachelor's degree ☐
   Master's degree or higher ☐

4. What is your current employment status?
   Self-employed ☐
   Employed ☐
   Unemployed ☐
   Studying/further education/training ☐
   Retired ☐

5. What is your current profession (e.g., carpenter, teacher, accountant, farmer, etc.)?

   ____

6. What is the level of your income (before taxes), based upon the average income of your country (in EUR: Norway, 2020: 40,241 EUR; Denmark, 2020: 30,621 EUR; Iceland, 2018: 39,918 EUR)?
   Lower income ☐
   On average ☐
   Higher income ☐

Section 2

7. How long have you been letting housing space on Airbnb?
   A total of ________ months
   (OR) A total of _________ years
   (open-ended question, two options only for the interviewers)

8. Which months of the year are you letting housing space on Airbnb?
   January ☐
   February ☐
   March ☐
   April ☐
   May ☐
   June ☐
   July ☐
   August ☐
   September ☐
   October ☐
   November ☐
   December ☐

9. How many hours per week (on average) do you spend managing all your properties that you let through Airbnb?
   A total of _______ hours / week.

10. How many people do you employ for the management of your property/properties on Airbnb?
    _________ people

11. How stressful do you find the management of your property/properties on Airbnb? Please specify as:
    1= very stressful, 2= stressful, 3= neutral, 4= not stressful, 5= not very stressful

1	2	3	4	5
☐	☐	☐	☐	☐

12. Do you offer your services on other platforms than Airbnb? (e.g., TripAdvisor, Booking.com, etc.)
    Yes ☐ No ☐
    If yes, please describe:

    ____

Section 3

13. Which type of property do you let?
    A whole house ☐
    A whole apartment ☐
    A shared apartment ☐
    Other type ☐
    If yes, please indicate the type(s):

    ____

14. How many properties do you let through Airbnb?
    1 property ☐
    2-10 properties ☐
    More than 10 properties ☐

15. Which is the best description of the location of your property/properties?
    City/town centre ☐
    City/town outskirts ☐
    Rural but accessible area ☐
    Rural but peripheral-remote area ☐

16. What kind of guests are booking with you: business versus private guests?
    Mainly business tourists ☐
    Mainly private tourists ☐
    A mix of business/private tourists ☐

17. What kinds of guests are booking with you: international versus domestic guests?
    Mainly Norwegian tourists ☐
    Mainly foreign tourists ☐
    A mix of Norwegian/foreign tourists ☐

Section 4

18. Do you provide your guests with any extra services?
    Yes ☐ No ☐
    If yes, please indicate the service(s):

    ____

19. Do you follow Airbnb's pricing suggestions?
    Yes ☐ No ☐

20. What do you think of the price of your listing(s) on Airbnb as compared with your area?
    Relatively lower price ☐
    Average price ☐
    Relatively higher price ☐
    I do not know ☐

21. Please specify your motive(s) to use Airbnb for letting property: *1= fully disagree, 2= somewhat agree, 3= neither agree nor disagree, 4= somewhat agree, 5= fully agree.*

	1	2	3	4	5
I want to be self-employed through Airbnb	☐	☐	☐	☐	☐
It is a need to secure my income.	☐	☐	☐	☐	☐
I want to earn extra income.	☐	☐	☐	☐	☐
It is a lifestyle preference for me.	☐	☐	☐	☐	☐
It is an opportunity for me to have (more) social contact and get to know more people	☐	☐	☐	☐	☐
Any other motives? Please indicate:	☐	☐	☐	☐	☐

Section 5

22. How do you use your earned money from Airbnb letting of property?
    Payments of the loans (e.g., house and car) ☐
    Payments of household expenses (e.g., groceries, cloths, internet access) ☐
    Payments of extra travel and leisure expenses ☐
    Savings ☐
    Investment in a business activity ☐
    Others (please specify)? ☐

    ____

23. Do you as an Airbnb host identify as a tourism service provider? Please specify as: *1= fully disagree, 2= somewhat agree, 3= neither agree nor disagree, 4= somewhat agree, 5= fully agree.*

1	2	3	4	5
☐	☐	☐	☐	☐

I do not know: ☐

24. How do you think that tourism through Airbnb impacts your region? Please specify as: *1= very negative impact, 2= negative impact, 3= neutral, 4= positive impact, 5= very positive impact.*

1	2	3	4	5
☐	☐	☐	☐	☐

I do not know: ☐

25. Is there anything else you want to add regarding your experience as host on Airbnb?

____

Appendix 2: Interview guide for the focus-group and follow-up interviews with selected tourism stakeholders in 2023 (see Table 2)

An open-ended questionnaire was used to guide the focus-group and subsequent individual interviews and conduct them so that in-depth and various answers on the part of the interviewees could be both captured and compared. The guide was composed of several sections: the first section asked for the positive impact (or benefits) of Airbnb activities for the case region, according to the interviewee's viewpoint, while the second section investigated the negative impact (or drawbacks). Examples of both benefits and drawbacks were provided to the interviewees, based upon the extant literature. The third section focused on the role of the Airbnb hosts in their local tourism networks, and the final section explored the role of Covid-19 on Airbnb-based tourism and for the Airbnb hosts in the case regions. The data analysis is work-in-progress. Prior to the fieldwork, the data collection was approved by the Norwegian authority SIKT, and it was declared that this research is in line with the Norwegian guidelines for data protection and research ethics.

Section 1

Q1. Positives: *In your opinion, what are the benefits of Airbnb activities in your region?*

Examples of possible benefits:

- more income through taxation;
- more travellers;
- attracting other travellers than the ones typically visiting the region;
- lower unemployment;
- better utilization of empty housing space;
- higher attractiveness of the region as such.

Section 2

Q2. Drawbacks: *In your opinion, what are the drawbacks of Airbnb activities in your region?*

Examples of possible drawbacks:

- Substituting bookings with other (more traditional) accommodation providers;
- Risk of gentrification through rising rents for local residents;
- Housing market changes (higher competition for free rental housing space);
- Low or no redistribution of income earned through Airbnb to the region;
- Negative effects on the environment,
- Overtourism and overcrowdedness during high seasons.

Use as follow up to positives/negatives if necessary…

- How do you, in total, view the role of Airbnb hosts in your case region (Nordland, Norway; North Iceland, Iceland; Northern Jutland, Denmark) in relation to the local economies and local tourism development?
- Do Airbnb hosts have an impact on local economic and tourism development at all according to your observations?
- If Airbnb hosts have an impact: do you view Airbnb hosts as playing a rather positive role, or negative role for local economic and tourism development

The growth of Airbnb – is it a thread, or an opportunity for the local communities? And for whom is it a threat, or an opportunity?

- Local residents (including the hosts in the region)
- Local/regional DMOs that promote tourism development
- Local businesses
- Local policy-makers and regional/urban/municipality-level planners

Section 3

Q3. Part of tourism: *Airbnb hosts and the local tourism environment*

Do you consider Airbnb hosts as being part of the local tourism environment?

If so, please explain why. If not, please do also explain why.

Section 4

Q4. Covid-19: *Airbnb hosts and the Covid-19 period (2020-2022)*

Did your assessment of Airbnb hosts and their activities change due to the Covid-19 times?

If so, please explain why.

What about in the aftermath of Covid-19?