



Professionalisation and performance of Airbnb hosts in rural regions

Birgit Leick^{a,*}, Sara Beth Mitchell^b, Karol Jan Borowiecki^b, Evgueni Vinogradov^c, Guðrún Þóra Gunnarsdóttir^d, Jie Zhang^e, Susanne Gretzinger^f, Vera Vilhjálmssdóttir^g

^a University of South-Eastern Norway, School of Business, Department of Business and IT, Bø, Norway

^b University of Southern Denmark, Department of Economics, Odense, Denmark

^c Nord University, Bodø, Norway

^d Icelandic Tourism Research Centre, Akureyri, Iceland

^e Centre for Regional and Tourism Research, Copenhagen, Denmark

^f University of Southern Denmark, Department of Entrepreneurship and Relationship Management, Kolding, Denmark

^g Icelandic Tourism Research Centre, Reykjavík, Iceland

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ABSTRACT

This paper explores the professionalisation and performance aspects of Airbnb hosts in rural regions in Denmark, Iceland, and Norway. More specifically, based upon the professionalisation of hosts, which represents a proxy for the scale of their entrepreneurial engagement, the host landscape in the rural regions is investigated, resulting in different host profiles, including individual single- and multiple-listing hosts, and small and large tourism companies. The paper subsequently estimates the service quality performance of Airbnb hosts in relation to their professionalisation in rural regions through a u-shaped relationship, with the professionalisation influencing the performance evaluation of the hosts by the users. This twofold empirical analysis amends the extant literature, as it provides both a more nuanced and more comprehensive description of the nature and scale of Airbnb host engagement in rural regions, and points to the vast entrepreneurial opportunities for private households and companies on the platform.

1. Introduction

Notwithstanding the extant literature on Airbnb-based tourism development and entrepreneurship (e.g., Zhang et al., 2019; Tussyadiah and Park, 2018; Xie et al., 2021), the nature of the entrepreneurial engagement of Airbnb hosts in rural regions has been both empirically under-studied and conceptually under-explained. While entrepreneurship in the tourism and hospitality sector is commonly associated with the formal establishment of new ventures (see Fu et al., 2019), Vinogradov et al. (2021) have also defined the usage of the existing global digital platforms, such as the sharing-economy platform Airbnb, as a distinct approach for the entrepreneurial engagement of individuals, which is, however, mainly described as micro-entrepreneurship in the context of tourism and hospitality management (e.g., Xu et al., 2021; Zhang et al., 2019). Micro-entrepreneurship denotes situations in which “individuals may derive a larger utility from entrepreneurship than from salaried work” (Rojas and Siga, 2009: p. 2668). This portrait matches the bulk of individuals operating on the Airbnb platform as hosts, who either face growth barriers or have no growth ambitions, but the description

neglects the existing variety of Airbnb hosts, including companies operating on the platform (Cocola-Gant et al., 2021). Hence, the exact nature and scale of the entrepreneurial engagement of Airbnb hosts remains fuzzy. In the literature, the umbrella term of the “professionalisation” is often utilised to frame the hosts’ entrepreneurial engagement, but the dichotomous operationalisation in terms of single-listing versus multiple-listing hosts (e.g., Sainaghi and Baggio, 2021; Kwok and Xie, 2019) does not fully reflect the various operations of Airbnb hosts, notably when considering rural regions.

Undoubtedly, rural regions have become more attractive as tourist destinations during the recent Covid-19 crisis due to their richness in natural or cultural amenities, outdoor recreational opportunities, and lower population densities (Seraphin, Dosquet, 2020; Vaishar and Šťastná, 2022; Bel et al., 2015). From a theoretical viewpoint, the availability of Airbnb amplifies the opportunities for individuals and households in rural regions to engage entrepreneurially at low cost by letting under-utilised property temporarily on the Airbnb platform, as these activities require no prior formal education or documented experiences in tourism (Fischer et al., 2019; Holikatti et al., 2019). In rural

* Corresponding author.

E-mail addresses: birgit.leick@usn.no, birgit.leick@mailbox.org (B. Leick).

regions, Airbnb hosts may complement the “thin” infrastructure of accommodation providers, such as family-owned hotels, Bed and Breakfast (B&B) pensions, and camping sites, and attract new types of travellers (Leick et al., 2022a; Larpin et al., 2019; Paulauskaite et al., 2017). This is important, because rural regions are typically characterised by a lack of important agglomeration economies, such as industry clusters, notably outside traditional industries (agriculture, forestry), low population densities and a less extensive infrastructure (Leick and Lang, 2018), compared to urban regions. Despite these weaknesses, many rural regions host natural amenities, which qualifies them as relevant tourist destinations that attract visitors (Falk et al., 2019; Loureiro, 2014). For example, in the Nordic rural regions, restrictions on long-distance international travelling imposed in 2020–2021 have led to a rising demand for accommodation, including Airbnb-based accommodation, by both domestic and international tourists from nearby neighbouring countries (Tveteraas and Xie, 2021; Jacobsen et al., 2021). To accommodate this demand, the satisfaction of guests in rural regions plays a crucial role (see, for example, Ye et al., 2019). For Airbnb-based tourism, recent literature reviews have also demonstrated the importance of the link between guests and hosts (Sainaghi, 2020; Prayag and Ozanne, 2018). Hence, the performance of Airbnb hosts in rural regions represents another important aspect related to their entrepreneurial engagement.

Departing from this evident knowledge gap, and based upon a large dataset from three rural regions of Denmark, Iceland, and Norway, this paper empirically explores the variety of Airbnb hosts in rural areas through professionalisation and performance considerations, notably the performance-professionalisation relationship. In line with the literature (e.g., Abrate et al., 2022; Casamatta et al., 2022; Sainaghi and Baggio, 2021; Cocola-Gant et al., 2021; Boto-García et al., 2021), the professionalisation of Airbnb hosts is defined in this paper as the management of a large or growing number of property listings on the platform, which may be complemented by a commercial corporate activity on the part of the hosts. Furthermore, the host performance is understood as the evaluation of the hosts by past users, which reflects both the present service quality of the hosts (Lawani et al., 2019) and the future purchase intentions of Airbnb users (Chen and Chang, 2018). With the empirical investigation presented, the paper contributes to the literature on Airbnb, entrepreneurship, micro-entrepreneurship, and rural tourism as follows: firstly, as research on Airbnb hosts in rural regions, as such, is scarce (Leick et al., 2022a; Larpin et al., 2019; Falk et al., 2019), the emerging host profiles identified in this paper amend the extant literature with its focus on urban regions (e.g., Gurran and Phibbs, 2017). Secondly, since this literature lacks a clear-cut distinction of individual (commonly dubbed ‘less professional’) versus corporate (‘professionalised’) hosts (Cocola-Gant et al., 2021; Sainaghi and Baggio, 2021), the paper will provide a more fine-grained description of hosts through the professionalisation-performance relationship. One key finding is that the host variety in rural regions includes different host types, consisting of both individual hosts (i.e., private households) and corporate hosts (i.e., companies), which has hitherto remained a neglected aspect in the research on Airbnb hosts and rural tourism (with the exception of an Icelandic study by Mermert, 2019). Thirdly, the present study provides insights into the potential for tourism companies to exploit the Airbnb platform for their business development, depending on the evaluation by users in the specific rural context. Notably the finding that a lower degree of professionalisation of Airbnb hosts is associated with their higher service-quality performance extends the existing empirical studies that address the pricing and revenue strategies of hosts, but neglect the service quality for customers as another important performance indicator (Abrate et al., 2022; Boto-García et al., 2021).

The remainder of this paper is organised as follows: The next section will present the literature review, including hypothesis development, which is followed by a section on the research context, methodology, research design and the description of the sample. This is followed by the

empirical results and the discussion. The final section provides the conclusion, an outlook on future research, and policy implications.

2. Literature review and hypothesis development

2.1. Entrepreneurial engagement and professionalisation of Airbnb hosts

Leick et al. (2022b) state that service providers on sharing-economy platforms, such as Airbnb, represent opportunity-exploiting individuals in line with entrepreneurship theories (e.g., Shane, 2003). The scope and scale of such entrepreneurial engagement on Airbnb, however, depends on several factors. The engagement of Airbnb hosts might be restricted due to national or regional regulations that limit the intensity of their platform operations (Chen et al., 2021; Vinogradov et al., 2020). Moreover, the motivation of Airbnb hosts plays a crucial role: quite clearly, individual hosts on the platform mostly aim to increase their household income, which corresponds to subsistence entrepreneurship (Viswanathan et al., 2014); some individual hosts are also driven by lifestyle orientations (Bredvold and Skålén, 2016; see Fu et al., 2019). In both constellations, the hosts focus less on growth through, e.g., the professional management of the housing space offered on Airbnb. This micro-entrepreneurship would thus differ from, for instance, tourism companies operating as Airbnb hosts (Griggio and Oxenwårdh, 2021; Sainaghi and Baggio, 2021). In the literature, such considerations about the professional behaviour of hosts have not been systematically addressed; more specifically, there exists a hitherto unclear distinction between the individual and corporate hosts, according to their motivation(s), which results in a lack of accuracy for this study. This leads to the first hypothesis:

H1: The entrepreneurial engagement of Airbnb hosts in rural regions can have different forms, including individual and corporate hosts.

A common approach in the empirical literature to approximate the entrepreneurial engagement of Airbnb hosts is their professionalisation. According to Abrate et al. (2022), Casamatta et al. (2022), and Sainaghi and Baggio (2021), Airbnb hosts with multiple listings are more professionalised than single-listing hosts, because they manage more properties and generate higher revenues. Furthermore, it has been shown that multiple-listing hosts possess more managerial competences to administer and develop listings over time, while single-listing hosts are less concerned with price or revenue optimisation (Gibbs et al., 2018) and have less capacities for an effective property management, e.g., by sharing fixed costs and becoming more resourceful over time (Xie et al., 2021). Sainaghi (2021) also argues that the pricing strategies of multiple-listing host are also different from those of single-listing hosts. However, there is a missing consensus in this literature about how the level of host professionalisation should be operationalised. While Boto-García et al. (2021, p.9) suggest a threshold value of ten listings for a professionalised host, Mermert (2019) uses a more sophisticated hierarchy of threshold values for multiple-listings. This leads to the next hypothesis for the context studied:

Hypothesis 2a. : Airbnb hosts in rural regions with a high number of listings are to a higher extent professionalised, compared to Airbnb hosts with only one listing.

In addition, the type of property managed by Airbnb hosts matters for their professionalisation, as it reflects the specific demand of travellers in a given tourism context. While, in metropolitan areas, Airbnb guests will probably book more single rooms or shared apartments than, e.g., detached houses or camping sites, this will be different in rural regions. Although the extant literature on Airbnb-based tourism does not address this argument, the earlier literature on rural tourism refers to the value that rural properties provide for customer experiences, often in combination with rural amenities (Kompulla, 2005; Gössling and Lane, 2015). It can thus be argued that an Airbnb host who lets only a room in a shared apartment or a shared house in a rural region will not be able to provide the same customer value due to the obvious

limitations to service provision or privacy issues (Lutz et al., 2018). By contrast, a host who is able to let an entire house or property in a rural region may provide a higher customer value and reach a higher degree of professionalisation, based upon a property type which allows for the inclusion of extra services combined with the rural amenities. This leads to the next hypothesis:

Hypothesis 2b. : *The professionalisation of Airbnb hosts is determined by the type of property let on Airbnb, with entire houses and apartments representing a higher professionalisation, compared to shared housing space.*

Furthermore, the literature points to the growing importance of corporate businesses operating as Airbnb hosts (Cocola-Gant et al., 2021; Boto-García et al., 2021). While the registration of a business by a host is virtually not addressed in most of the empirical literature (see Boto-García et al., 2021, or Mermert, 2019), the very act of using a registered business as an Airbnb host indicates a higher degree of professionalisation and entrepreneurial engagement because the management of properties is embedded in the commercial activities of a corporate entity (e.g., a farm, hotel or B&B pension, or another business with available housing space for guests; Griggio and Oxenwårdh, 2021; Sagheim and Nilsen, 2021). This leads to another hypothesis:

Hypothesis 2c. : *Airbnb hosts with a registered corporate entity are to a higher extent professionalised, compared to Airbnb hosts without a registered business.*

2.2. Performance aspects and Airbnb hosts

To generate revenue from Airbnb bookings, any Airbnb host must be successful with the service provision offered on Airbnb by selling the service to the platform users. Receiving positive reviews and high ratings by users is thus essential. The Airbnb platform grants hosts with a high number of positive reviews the status “Super host”, which signals a high reputation and trustworthiness.¹ Customer reviews, which denote the general feedback that past users provide to hosts, and customer ratings, which provide the evaluation of a host by past users, serve as indicators of the service quality of Airbnb hosts, as viewed by their customers (Lawani et al., 2019). In other words, the number of reviews represents a measure of the past demand, while the rating is a measure of the experienced quality by past customers. Since ratings can be skewed towards being overly positive (Meijerink and Schoenmakers, 2021; Zervas et al., 2021), the number of reviews can serve as an additional indicator of the users’ evaluation about the host performance because it reflects the purchase intention of prospective customers (Zhang, 2019; Ju et al., 2019; Xie and Mao, 2017; Chen and Chang, 2018). Importantly, both indicators pertain to the *service quality from a user perspective* (Li et al., 2022; Ju et al., 2021; Mencarelli and Riviere, 2015), but do not include the hosts’ pricing or revenue considerations that the literature mainly addresses (e.g., Kwok and Xie, 2019).

Notwithstanding this, there might exist a link, at least indirectly, between the service quality performance and the revenue performance of hosts because positive customers ratings may be associated with higher prices that positively rated hosts can enforce (Lawani et al., 2019), which, again, points to a certain level of professionalisation (Abrate et al., 2022; Kwok and Xie, 2019; Xie & Mao, 2019). However, the exact relationship between the professionalisation and performance of Airbnb hosts is far from clear (see Sainaghi, 2021). There is some evidence that ratings are negatively associated with multiple-listing hosts, as compared to single-listing hosts (Xie et al., 2021). This – at first glance – contradictory finding is explained by the established competency and reputation of a host, which will not need further

positive signalling (Xie et al., 2021). Hence, it can be argued that the degree of professionalisation seems to influence the service quality performance, which is hypothesised as follows:

Hypothesis 3a. : *The professionalisation of Airbnb hosts determines the quantity and/or quality of their ratings and reviews on the part of Airbnb users who have reviewed the hosts.*

Hypothesis 3b. : *A higher degree of professionalisation of Airbnb hosts will be associated with higher evaluations of the hosts’ service quality by past users.*

The performance of Airbnb hosts, as measured through these evaluations by users, is moreover influenced by learning experiences (Holikatti et al., 2019), which reflect the knowledge acquisition and skill development of the hosts on the platform. Since Airbnb does not require hosts to possess a dedicated education in tourism, marketing, or sales, etc., or prior professional experience in these fields, the experience of hosts will evolve as a “learning-by-doing” process over time that supports a higher level of professionalisation and entrepreneurial engagement. Hence, the learning experiences can be approximated by the duration of the platform engagement (Holikatti et al., 2019; Gibbs et al., 2018; see, also, Zhang et al., 2019), which leads to another hypothesis:

Hypothesis 4. *The performance of Airbnb hosts, measured through the user reviews and ratings, is determined by their learning experiences, measured through the duration of their engagement on Airbnb.*

2.3. Host-property distance in a rural context

In the context of rural regions, the professionalisation and performance of Airbnb hosts and the relationship between the professionalisation and performance of the hosts can furthermore be associated with the physical distance between the host and the property in question. While the literature considers only the distance from the property to amenities, e.g., city centres (Gyódi and Nawaro, 2021; Chung and Sarnikar, 2021), the distance between the location of a host and the property that is let on the platform has not been addressed yet. Notably in rural regions, however, the host-property distance affects the guest experience, for instance, with regard to remote locations (Kordel, 2016) or second-home tourism with the hosts living elsewhere (Bieger et al., 2007; Hall and Müller, 2004). In these cases, a large distance means that hosts need to invest resources into the management of the Airbnb-let property (e.g., with multiple listings on the platform) and/or outsource the management to third parties. Hence, it can be assumed that, with a large host-property distance, a high level of host professionalisation might impair the service-quality performance. While this aspect has not been considered in the extant literature, the literature reports the various effects of location- and property-specific attributes on customer satisfaction, i.e., reviews and ratings by Airbnb users (Cheng and Jin, 2019). Hence, it will be hypothesised as follows:

Hypothesis 5. *The performance of Airbnb hosts in rural regions will be negatively associated with the host-property distance.*

3. Research context, methodology and research design

3.1. Research context, sampling and data

The hypotheses established are explored for three Nordic regions: “Northern Iceland” (Iceland), “Northern Jutland” (Denmark) and “Nordland” (Norway) [Online Appendix 1]; these rural regions attract a high number of both domestic and foreign travellers, notably during high seasons. Over the past few years, including the recent Covid-19 crisis, Airbnb turned into an important accelerator for rural tourism in these regions. A dataset on Airbnb properties and hosts in the three regions is used, which stems from a purpose-built python application that automatically extracted information on both the properties and the hosts

¹ The Airbnb qualifying criteria requires that hosts maintain at least a 4.8 overall rating over the previous 365 days. <https://www.airbnb.com/help/article/829/how-to-become-a-superhost>.

(autumn 2021).² The resulting dataset contains information on 5875 Airbnb properties associated with 3246 hosts. For each property, the following information is used (Table 1):

- General information: a link to each Airbnb listing, a unique property ID generated from that hyperlink, the host name, and a link to the host’s Airbnb profile;
- Property characteristics: type of property (either home or other³), the maximum number of guests,⁴ the number of bedrooms, the number of beds, and the number of bathrooms;
- Property location: reported location and approximate latitude and longitude (described in more detail below); and
- Property ratings: total number of reviews, overall rating, cleanliness score, communication score, check-in score, accuracy score, location score, and value score.

The ratings and scores are based upon a 5-point star-based system. The overall rating is provided by the guest, and not a composite score based upon the sub-categories. The following information was collected from each host profile: host name, link to host profile, a unique host ID generated from that hyperlink, the year the host joined Airbnb, the reported host location, and the total number of reviews for the respective host. In addition, the host location was geocoded to identify the latitude and longitude.⁵

As the descriptive statistics show, some hosts had received the Superhost status. In these instances, the field indicating the overall rating of the property included the text “Superhost”. However, for these properties, no exact rating is available, and they are thus treated as missing values. This affects 39 of the 5875 observations, or 0.66 per cent of the sample. Each property listing (and host profile) contains a text field that indicates the location of the property and a map with the approximate location. However, based upon the data collected, this appears to be a free-text field with no address verification, i.e., the hosts were able to provide any description of their choosing and are not required to provide the street address or municipality. In most cases, the hosts provided the city/town name. In a very limited number of instances, the host provided the street address of the property. The geographic co-ordinates of the location were also identified. In several instances, the host provided only the name of the region (e.g., NUTS-2 or NUTS-3 region) or the country. In these cases, the approximate location was determined using the map feature. Airbnb does not provide the exact location of the properties on their webpage. Instead, the locations on the map are placed randomly within a 500 m radius around the actual

² During the data collection, no property data were linked to individual persons, and no personal information was collected or saved.

³ The Airbnb classification is utilised. The website does not provide more detailed information about the types of properties included in the “other” category.

⁴ At the time of data collection, Airbnb placed a maximum of 16 guests per property to limit large gatherings during the Covid-19 pandemic. Some number of properties, such as guesthouses and hotels, had a capacity for more than 16 guests based upon the number of beds, bedrooms, and bathrooms. For example, one property indicated that there are 50 beds available. It is not possible to estimate the guest limit as the size of the beds was not indicated in the property listing. However, since this affected a very small portion of the data, the provided value for the maximum number of guests was used.

⁵ This involved manually correcting some in host location data where the location was easily identifiable, but the format of the location information was not compatible with the geocoding service. The data were geocoded in R (v. 4.1.3, R Core Team, 2022) using the *tidygeocoder* package (v. 1.0.5; see Cambon et al., 2021), which uses the Nominatim geocoding service (OpenStreetMap contributors, 2021). With respect to data protection rights, geolocation data were only approximated so that no direct linked could be potentially established to individual residents (it corresponds to Airbnb practice for geolocation).

Table 1
Summary statistics.

Variable	No. obs	Mean	SD	
Host information				
Total hosts	3246			
Host since	4462	2016.91	2.32	
No. properties per host	3246	296.67	543.81	
No. Hosts with reviews	4262			
No. host reviews	370,146	86.85	149.48	
Property characteristics				
Total properties	5875			
Host-property distance	3428	213.69	687.31	
Max guests	5829	5.49	2.73	
No. Bedrooms	5705	2.47	1.39	
No. Beds	5780	4.04	2.66	
No. Bathrooms	5800	1.25	0.77	
Property reviews				
No. properties with reviews	3433			
No. property reviews	136,472	39.75	57.08	
Rating	3432	4.75	0.3	
Cleanliness score	3432	4.72	0.37	
Communication score	3433	4.86	0.32	
Check-in score	2033	4.87	0.29	
Accuracy score	3433	4.82	0.28	
Location score	3423	4.81	0.24	
Value score	3435	4.71	0.31	
	No. obs.	%		
Distance category				
Within 10 km	1401	23.85%		
11-50 km	534	9.09%		
51-100 km	251	4.27%		
101-200 km	425	7.23%		
201-500 km	500	8.51%		
500 + km	317	5.40%		
N/A	2447	41.65%		
Property type				
Entire home	4883	83.11%		
Other	992	16.89%		
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location. The unique property locations are illustrated in **Online Appendix 2**,⁶ in which multiple properties in the same city and thus the same geographic co-ordinates will be represented by a single point.

For the geographic co-ordinates, Vincenty ellipsoidal geodesic distance was computed from each property location to the host location. These distances were calculated in R (v. 4.1.3; see R Core Team, 2022) using the *geodist* package (Padgham et al., 2017). Subsequently, a categorical variable was created, which indicates whether the host lives within a distance of 10 km from the property, between 11 to 50 km from the property, between 51 to 100 km from the property, between 101 to 200 km from the property, between 201 to 500 km from the property, or more than 500 km from the property.

Furthermore, four categories of hosts were defined according to the number of properties that they own and/or manage and the type of host (company or individual): an individual with a single property, an individual with multiple properties, a small company with fewer than 50 properties, and a large company with 50 or more properties. To generate these categories, the total number of properties per host within our dataset was calculated. Thus, this is not an exhaustive count of properties, as the host may be associated with properties outside our sample regions, but it indicates the approximate scale of ownership. The host is identified as an individual or a company based upon the host name. If the host name included terms such as *hotel*, *guesthouse*, *farmhouse*, *hostel*, etc., or a registered company name,⁷ the respective host was classified as a company. If the host name included typical given names or surnames, the host was classified as an individual.⁸ The host type was utilised as a proxy for the degree of professionalisation.

3.2. Research design and methodology

As a baseline, an OLS model is used to estimate the following equation.⁹

$$IE(y_{ip}) = \beta_1 HostType_i + \beta_2 X_i + \beta_3 Z_p + \epsilon_{ip}$$

where y_{ip} is a indicator of the performance of host i at property p , $HostType_i$ is a categorical variable indicating whether host i is a large company, small company, individual with a single property, or an individual with multiple properties, X_i is a vector of host-specific characteristics, Z_p is a vector of property-specific characteristics, and ϵ_{ip} is an error term.

The regression is separately estimated using two indicators of host performance as the dependent variable: the number of property reviews and the overall property rating. The year in which the host joined the platform will be controlled. The host-specific and property-specific variables used in the empirical analysis are described in Table 2.

As the ratings data are heavily skewed, the equation above is re-estimated using a Logit model to determine the probability of the property being in the top quartile of ratings and, separately, the bottom quartile of ratings. The same independent variables are used, but the

⁶ All maps were created in R (v. 4.1.3; see R Core Team, 2022) using the following packages: *ggplot2* (Wickham, 2016), *sf* (Pebesma, 2018), *sp* (Pebesma and Bivand, 2005; Bivand et al., 2013), *rgeos* (Bivand and Rundel, 2019), and *naturalearth*, *naturalearthdata* (naturalearthdata.com).

⁷ Several larger companies were identified, and, in addition, several smaller registered companies were identified as hosts, for instance, hosts that have the abbreviation A/S in the host name.

⁸ This approach is subject to some degree of error, as some companies may have listed the name of a management agent as the host. Furthermore, only those individuals who could be associated with a company were considered. However, the dataset was too large to confirm the status of each host manually.

⁹ All statistical work was conducted using R (v. 4.1.3; see R Core Team, 2022). The OLS and Logit regressions were implemented using the *glm* function from the base *stats* package. All figures were produced using the *ggplot2* package (Wickham, 2016).

Table 2
List and description of variables.

Variable Name	Description
Host since	The date on which the host joined Airbnb as a host.
Number of host reviews	The total number of reviews which the host has received from guests.
Type of property	A categorical variable indicating whether the property is an entire home (reference category) or another property.
Maximum number of guests	A continuous variable indicating the maximum number of guests allowed in the property. Truncated by Airbnb at 16 guests.
Number of bedrooms	A continuous variable indicating the total number of bedrooms in the property.
Number of beds	A continuous variable indicating the total number of beds in the property.
Number of bathrooms	A continuous variable indicating the total number of bathrooms in the property.
Host-property distance	A categorical variable indicating the distance between the host location and the location of the respective property. Categories are: 10 or fewer km, 11 to 50 km, 51 to 100 km (reference category), 101 to 200 km, 201 to 500 km, or more than 500 km.
Country	A categorical variable indicating whether the property is located in the case region of Denmark (reference category), Iceland or Norway.

highest and lowest ratings' quartiles are utilised as the dependent variables. This analysis allows us to look beyond the average host performance by examining the relationship between the degree of professionalisation and exceptionally good and poor host performance. For example, a higher degree of professionalisation may be a risky endeavour in which hosts either have great success or great difficulties.

As a final step, the first analysis is repeated using the rating sub-category scores for cleanliness, communication, check-in, accuracy, location and value. This may provide an insight into whether a higher degree of professionalisation is associated with better performance across a variety of performance metrics, or whether more professionalised hosts systematically prioritise certain metrics. For example, hosts with multiple listings of properties may choose to prioritise certain aspects of property management (e.g., maintaining a clean property) upon which they believe guests place a particularly high value. On the other hand, more professionalised hosts may perform better across all metrics simply because, by renting out multiple properties, they share more experiences with guests and thus develop a better understanding of guest preferences and expectations.

4. Empirical findings

4.1. The Airbnb host landscape in the rural regions

The intra-regional differences and commonalities regarding the distribution of Airbnb hosts across the three case regions are provided in Tables 3–5. Consistent with previous research (e.g., Sainaghi and Baggio, 2021), the majority of the properties in the sample is associated with individual hosts, rather than companies. While company-owned/company-managed properties represent a substantial share of the Airbnb market only in the Danish case region (46 per cent), their share is much smaller in Iceland (11 per cent) and in Norway (4 per cent). In addition, 45 per cent of the properties are only associated with a single property, while around a quarter of the properties is let by hosts who are associated with multiple properties. Around two per cent of the sample are associated with small businesses (<50 properties). More than a quarter of the properties in the sample are associated with a large company (with 50 + properties).

The Airbnb properties and hosts are not evenly distributed across the sample regions. Almost 60 per cent of the properties are in the Danish region, compared to around 30 per cent in Norway, and 10 per cent in Iceland. In comparison, only 49 per cent of hosts have properties in the

Table 3
Summary statistics by sample region.

	Denmark			Iceland			Norway		
	No. obs	Mean	SD	No. Obs	Mean	SD	No. obs	Mean	SD
Host information									
Total hosts	1599			326			1322		
Host since	2208	2016,95	2,32	632	2016,35	2,30	1622	2017,08	2,31
No. properties per host		492,47	630,15		5,79	12,40		2,79	31,63
No. hosts w/reviews	2108			567			1587		
No. host reviews	187,011	88,71	147,01	101,971	179,84	217,77	81,164	51,14	100,15
Property characteristics									
Total properties	3522			632			1721		
Host-property distance	1786	167,29	728,43	419	132,75	330,48	1223	309,18	705,57
Max guests	3487	5,90	2,70	622	4,04	2,32	1720	5,19	2,70
No. bedrooms	3456	2,59	1,28	597	1,74	1,13	1652	2,47	1,59
No. beds	3448	4,38	2,63	618	2,96	2,15	1714	3,74	2,75
No. bathrooms	3507	1,29	0,63	620	1,05	0,62	1673	1,23	1,03
Property reviews									
No. properties w/reviews	1683			526			1224		
No. property reviews	54,605	32,45	43,50	39,688	75,45	93,24	42,179	34,46	46,47
Rating	1682	4,71	0,35	526	4,79	0,24	1224	4,79	0,24
Cleanliness score	1681	4,64	0,44	527	4,85	0,21	1224	4,77	0,29
Communication score	1682	4,82	0,41	527	4,86	0,23	1224	4,91	0,17
Check-in score	1123	4,84	0,35	280	4,86	0,26	630	4,91	0,16
Accuracy score	1682	4,79	0,34	527	4,85	0,21	1224	4,85	0,20
Location score	1682	4,77	0,29	528	4,85	0,17	1213	4,84	0,18
Value score	1683	4,68	0,37	528	4,75	0,23	1224	4,74	0,25
Distance category									
Within 10 km	870	24.70%		167	26.42%		364	21.15%	
11-50 km	276	7.84%		50	7.91%		208	12.09%	
51-100 km	89	2.53%		30	4.75%		132	7.67%	
101-200 km	155	4.40%		54	8.54%		216	12.55%	
201-500 km	362	10.28%		111	17.56%		27	1.57%	
500 + km	34	0.97%		7	1.11%		276	16.04%	
N/A	1736	49.29%		213	33.70%		498	28.94%	
Property type									
Entire home	3082	87.51%		378	59.81%		1423	82.68%	
Other	440	12.49%		254	40.19%		298	17.32%	

Table 4
Properties by host type.

Host type	N	%
Large company	1606	27.34%
Small company	137	2.33%
Individual w/single property	2667	45.40%
Individual w/multiple properties	1465	24.94%
Total	5875	100.0%

Table 5
Properties by host type and sample region.

	Denmark		Iceland		Norway	
	N	%	N	%	N	%
Large company	1585	45.00%	19	3.01%	2	0.12%
Small company	16	0.45%	51	8.07%	70	4.07%
Individual w/single property	1376	39.07%	197	31.17%	1094	63.57%
Individual w/multiple properties	545	15.47%	365	57.75%	555	32.25%
Total	3522	100.00%	632	100.00%	1721	100.00%

Danish region, 40 per cent have properties in the Norwegian, and 10 per cent in the Icelandic region. This suggests that multi-listing hosts dominate the rural Danish market, while this is less common in rural Iceland and Norway. Although there are relatively few Icelandic hosts, they receive around twice the number of host reviews of the average Danish host, and more than three times the number of host reviews of the average Norwegian host. The properties in Iceland are, on average, smaller than the properties in Denmark and Norway. Notably, while the

average properties in Denmark and Norway have a similar number of bedrooms (2.5) and bathrooms (1.2), the Danish properties have more beds and a higher guest capacity. The properties in the Icelandic region are the nearest to the host residence, while the properties in Norway are the furthest from the host residence. While this is no surprising finding, given the geography of the respective countries, it does indicate that the average Norwegian host may require more resources to maintain the property.

Although the average host in all three sample regions has around the same amount of experience in terms of when the host joined Airbnb, the higher number of reviews for hosts in Iceland points to a higher demand for Airbnb-let properties in the Icelandic case region. This could be due, in part, to the popularity and success of the Airbnb platform in the country from 2009 onwards (Mermert, 2019), as well as successful efforts by rural Icelandic hosts to promote their properties and generate demand. Similarly, there are no substantial differences in the average property ratings across the sample regions. Although the ratings of hosts are generally positively skewed, there is greater variability in the ratings of Danish properties, which could indicate more extreme ratings values.

Furthermore, the individually-managed and company-managed properties in the regions in Denmark, Iceland, and Norway are separately plotted across the regions in **Online Appendix 2**. In general, company-managed properties tend to be located in coastal areas, while individually-managed properties are more distributed between coastal, inland and urban areas. Notably, there are relatively few company-managed properties in or around the city of Aalborg (the largest city in the Danish region), whereas there is a notable cluster of individually-managed properties in this area. Hence, corporate hosts seem to be represented with their properties mainly in the traditional tourist destinations in this region.

4.2. The impact of the degree of professionalisation on overall performance

It is furthermore analysed (Table 6) how the degree of professionalisation is associated with the service-quality performance of hosts with respect to the past demand (proxied by the number of property reviews) and the past quality evaluation of hosts (measured by the property rating). After controlling for host experience, property characteristics, and the host-property distance, it is found that properties let by both small and large companies perform worse than properties let by individual hosts with multiple properties on Airbnb.

Specifically, properties let by a small company have 39 fewer reviews and a rating that is 0.192 points lower compared to those managed by individuals with multiple properties, while properties managed by a large company have 149 fewer reviews and a rating that is 0.32 points lower. Given that the rating has a standard deviation of 0.3, this implies that the ratings for a property managed by a small company or large company are, respectively, two thirds of a standard deviation and a whole standard deviation lower than that of a property managed by an individual with multiple properties.

However, properties let by an individual with only one property on Airbnb perform better than properties associated with multi-property individual hosts. These hosts have, relatively speaking, 22 more reviews and 0.068 (a quarter of a standard deviation) more points. Hence, there seems to exist a distinction between individual Airbnb hosts versus

commercial hosts in particular, as a higher number of managed properties would not per se imply higher efficiency through higher ratings by users. Instead, hosts with a low number of properties show a higher efficiency and performance, according to their past users. However, their entrepreneurial engagement might be trumped by resource constraints (e.g., time, money, etc.), and, with more rentals, their performance might be worse.

Indeed, there is evidence that this may be the case, as there is greater demand for properties located within 50 km of the host residence compared to those located between 101 to 200 km from the host residence. These properties perform no better in terms of the overall rating. There is no relative advantage or penalty associated with a host living more than 200 km from his or her property. This could suggest that all hosts prioritise the management and upkeep of their properties to avoid low ratings; however, hosts that live closer to their properties have more time available to promote their properties.

In addition, there is less demand for properties with more bedrooms, but properties with more bedrooms and bathrooms have a higher overall rating. Relative to properties that are entire homes, other types of properties have fewer reviews. Properties in the Norwegian region perform no better or worse than properties in the region in Denmark with respect to both measures of host performance. However, properties in the Icelandic region are rated higher than properties in Denmark and Norway.

Given that the ratings are skewed so positively, a Logit model is used as a next step to determine the probability of a property being in the highest performance quartile or the lowest performance quartile (Online Appendix 3). Relative to properties let by individuals with multiple properties on Airbnb, there is a weak positive association between company-managed properties and being in the top quartile in terms of the number of reviews. The odds of being in the top quartile was 1.067 times higher for a property managed by a large company, and 1.421 times higher for a property managed by a small company. There is also a weak positive associated with properties managed by a small company and the overall rating.

In contrast, there is a weak negative association between properties managed by an individual with a single property on Airbnb and being in the top quartile of reviews: they are 0.831 times as likely to be in the top quartile compared to properties managed by an individual with multiple properties on Airbnb. This group of properties was also 4.58 times more likely to be in the lowest quartile in terms of number of reviews. Similarly, for these properties, there is a negative association with being in the top quartile of ratings and a positive association with being in the lowest quartile of ratings. Therefore, while hosts with a low degree of host professionalisation are, on average, associated with more reviews and a higher rating, these hosts are less likely to achieve an exceptional degree of success, and are more likely to be poor performers compared to more professionalised (but not corporate) hosts when measured as the likelihood of being in the top quartile.

Finally, the relationship between the degree of host professionalisation and a variety of performance metrics (cleanliness, communication, check-in, accuracy, location, and value) is examined (Online Appendix 4). The baseline regression model is re-estimated using the various rating sub-categories as the dependent variables. The results are broadly consistent with earlier findings (Table 6) that, relative to individuals with multiple properties on Airbnb, individuals with only a single property have higher ratings, while properties let by companies tend to have lower ratings.

One exception is with the location score, in which individual hosts with only one property on Airbnb perform no better or worse than individual hosts with multiple properties. This result suggests that host type is not a strong predictor of the location score. Hosts can probably have an impact on this metric most when they purchase the property, but they could also influence customer expectations in the description of the property. Hence, evidently, the location rating indicates only whether the actual location meets the customer's expectation based

Table 6
Overall host performance.

Host characteristics	No. Reviews	Rating
Individual with 1 property	22.396 *** (2.267)	0.068 *** (0.012)
Small company	-39.464 *** (7.945)	-0.192 ** (0.041)
Large company	-149.118 *** (9.748)	-0.320 *** (0.050)
Host since	-0.290 (0.483)	0.003 (0.002)
No. host reviews	0.234 *** (0.008)	0.00003 (0.00004)
Property characteristics		
Max guests	0.606 (0.796)	-0.002 (0.004)
No. bedrooms	-6.013 *** (1.425)	0.016 ** (0.007)
No. beds	0.462 (0.665)	-0.006 (0.003)
No. bathrooms	-2.755 (2.083)	0.035 *** (0.011)
Property type: Other	-6.424 ** (2.666)	-0.022 (0.014)
Iceland	1.110 (3.276)	0.077 *** (0.017)
Norway	0.803 (2.242)	0.007 (0.012)
Host-property distance		
Within 10 km	6.218 ** (3.083)	0.012 (0.016)
11-50 km	6.834 ** (3.475)	0.011 (0.018)
51-100 km	0.158 (4.179)	0.010 (0.021)
201-500 km	1.845 (4.131)	0.023 (0.021)
500 + km	3.204 (4.219)	0.031 (0.022)
Constant	599.514 (973.636)	-0.568 (4.995)
Observations	2186	2186
R2	0.342	0.080
Adjusted R2	0.337	0.073

Note: *p < 0.1; **p < 0.05; ***p < 0.01. Standard errors in parentheses.

upon the description regardless of how many properties the host manages. This seems different for corporate hosts offering property on Airbnb because, in this case, customers are more disappointed by the location (relative to the reference category). However, the magnitude of the effect for corporate hosts is quite small. In addition, the “penalty” associated with properties managed by large companies is smaller than that for small companies with respect to the cleanliness score. Hence, this points at different operating routines of individuals versus corporate hosts, which are partly evaluated independently of the tourism-destination attributes, but partly overlay the customer rating for the location.

5. Discussion

This paper illustrates an uneven distribution of various host types across rural regions, which points to a variety of Airbnb hosts in rural regions (confirming hypothesis 1). While large tourism companies as hosts dominate traditional coastal tourist villages in Denmark, other parts of the Danish case region as well as the Norwegian and Icelandic case regions are characterised by a more even distribution of individual single- and multiple-listing hosts and companies. Moreover, the results suggest different host profiles according to professionalisation and performance considerations: individual single-listing hosts (described as ‘non-professionals’, Sainaghi and Baggio, 2021) achieve high performance reviews and ratings by users in the rural regions. Although these hosts do not represent professionalised entrepreneurial individuals, based upon the indicators used, they provide important customer value, measured through the evaluation of their past service quality by users. Another host profile is that of individual multiple-listing hosts in the rural regions, who achieve lower reviews and ratings by their customers compared to individual single-listing hosts. A third host type is that of large tourism companies that use Airbnb as a promotional and distribution channel; however, they operate only in some highly frequented tourist destinations in the Danish region, presumed, notably during the high season. The fourth emerging host type on Airbnb is that of small tourism companies (e.g., family-owned hotels, farms, B&B pensions, guesthouses, etc.; Griggio and Oxenwårdh, 2021; Sagheim and Nilsen, 2021) that benefit from relatively high ratings by Airbnb users, as compared to the large tourism companies. They are also more evenly distributed across the regions studied. In the literature, such a distinction between large versus small tourism companies as Airbnb hosts has not been considered, although the literature reports a rising importance of corporate hosts (Cocola-Gant et al., 2021; Boto-García et al., 2021).

Confirming Hypotheses 2a and 2c, the professionalisation of Airbnb hosts is represented by different configurations, which includes private individuals offering single or multiple listings on Airbnb and

managing them without registering a business and registered companies that use Airbnb as a platform for their accommodation services embedded in an existing business. Furthermore, hosts with shared property types, such as shared rooms or shared apartments, score no better or worse in terms of performance than hosts offering entire houses or apartments through Airbnb. Thus, Hypothesis 2b about the influence of the property type on the host professionalisation could not be confirmed.

Moreover, further novel insights can be provided into the association between the performance and professionalisation of Airbnb hosts in rural regions. By utilising host professionalisation in terms of their property listings, the registration of a business, and host-listing characteristics (property type), the service-quality performance of hosts is positively associated with both individual single-listing hosts and small corporate hosts, whereas it is negatively associated with large corporate hosts. Based upon this observation, a non-linear u-shaped relationship between the service-quality performance and host professionalisation is proposed (Fig. 1): in particular, a transition from a low to a moderate degree of professionalisation will be associated with a better service-quality performance of a host. However, as a host becomes more highly professionalised, and, in particular, increases his or her number of properties as a commercial business, that is, the host becomes a larger company, the performance will begin to decline. The resulting u-shaped (i.e., initially, a positive relationship of less professional hosts and their service-quality performance, followed by more professionalised hosts facing a negative relationship towards service-quality performance) has not been addressed in the extant literature on Airbnb hosts and performance. Therefore, this novel finding extends the previous literature which focused on the pricing or revenue performance of hosts (Xie et al., 2021; Kwok and Xie, 2019). In summary, while Hypothesis 3a is confirmed, Hypothesis 3b is rejected. Regarding the learning experiences of hosts, Hypothesis 4 is not confirmed, showing that the duration of the host engagement on the platform has no statistically significant impact on their service-quality performance.

Finally, regarding the host-property distance, the findings show that a short distance (below 10 km) between the host location and the property location is associated with higher ratings and reviews, confirming Hypothesis 5. The first three columns of Table 7 summarise the results regarding the established hypotheses.

6. Conclusion, scope, implications and limitations

6.1. Conclusion

This paper makes several novel contributions to the extant Airbnb-related literature in tourism and hospitality management: firstly, it

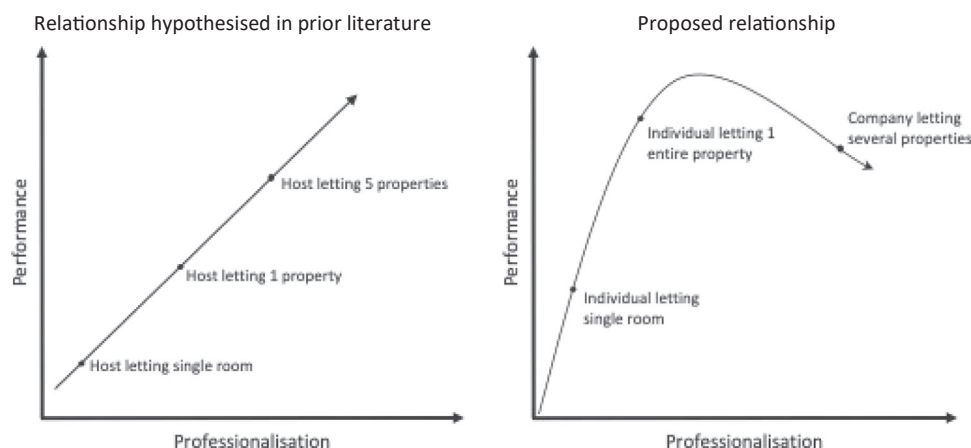


Fig. 1. Illustration of hypothesised performance-professionalisation relationship. Source: Own illustration.

Table 7
Evaluation of hypotheses and research outlook.

Hypothesis	Result	Suggestions for future research
H1 The entrepreneurial engagement of Airbnb hosts in rural regions can have different forms, including individual and corporate hosts	Confirmed	Explore the diversity of host profiles in depth. Replicate and/or validate the results for other and/or more case regions.
H2a Airbnb hosts in rural regions with a high number of listings are to a higher extent professionalised, compared to Airbnb hosts with only one listing.	Confirmed.	Clarify the profiling of individuals with single listings versus multiple listings in future research.
H2b The professionalisation of Airbnb hosts is determined by the type of property let on Airbnb, with entire houses and apartments representing a higher professionalisation, compared to shared housing space.	Unclear.	Investigate the role of property types on service quality performance in rural settings further.
H2c Airbnb hosts with a registered corporate entity are to a higher extent professionalised, compared to Airbnb hosts without a registered business.	Confirmed.	Clarify the profiling of non-professional individuals (notably those with multiple listings) versus professional hosts (e.g., small companies).
H3a The professionalisation of Airbnb hosts determines the quantity and/or quality of their ratings and reviews on the part of Airbnb users who have reviewed the hosts.	Confirmed.	Investigate in more depth the operationalisation utilised for professionalisation. Explore in depth the operationalisation of service quality performance as a distinct performance dimension (in contrast to revenue performance).
H3b A higher degree of professionalisation of Airbnb hosts will be associated with higher evaluations of the hosts' service quality by past users.	Rejected.	Investigate the role of single-listing individuals as potential entrepreneurial hosts by incorporating user reviews.
H4 The performance of Airbnb hosts, measured through the user reviews and ratings, is determined by their learning experiences, measured through the duration of their engagement on Airbnb.	Confirmed.	Conduct further empirical research that adds experienced learning effects and knowledge gains by hosts.
H5 The performance of Airbnb hosts in rural regions will be negatively associated with the host-property distance.	Confirmed.	Validate this finding with other empirical case studies. Investigate and test the u-shaped curve that illustrates the professionalisation-performance relationship against the backdrop of the distance.

describes the fine-grained Airbnb host landscape in Nordic rural regions through different host profiles according to professionalisation and performance aspects. Secondly, it identifies a non-linear u-shaped performance-professionalisation relationship for Airbnb hosts in rural regions. It is argued, in this study, that the service-quality performance of hosts may begin to decline at a certain level of professionalisation, which could be due to, for example, differences in customer expectations for various host types (Paulauskaite et al., 2017). Thirdly, the paper finds that the entrepreneurial engagement of commercial hosts on Airbnb, which is embedded in a registered corporate business, is associated with lower quality-performance scores of hosts, pointing to their relatively higher satisfaction with individual hosts in rural regions. This would indirectly confirm the assumption that Airbnb hosts represent (at

least to some extent) micro-entrepreneurs who do not necessarily strive for growth (Xu et al., 2021; Zhang et al., 2019), but contribute significantly to customer satisfaction in rural tourism. Finally, the paper adds further novel insights to performance aspects of Airbnb hosts in tourism. In the extant literature, the service-quality performance (measured by the rankings and reviews of past customers) in relation to the professional behaviour of Airbnb hosts has not been addressed to date; instead, there exists knowledge about the pricing and revenue performance of hosts. The measure used in this paper points to a user perspective and highlights the importance of quality-of-life improvements for rural dwellers through micro-entrepreneurial activities that are resonated by positive customer responses (see Brereton et al., 2011).

6.2. Scope and implications

The trend of rural tourism growth has been particularly accelerated by the Covid-19 pandemic (Vaishar and Štastná, 2022) and does not seem to be slowing down. Rural tourism is associated with manifold economic (e.g., economic growth and local employment) and non-economic benefits (such as improved social cohesion of local communities or a deterrence of local outmigration). Airbnb, as a de-centralised platform-based accommodation provider, has proven resilient during the recent crisis (Dogru et al., 2023), even in rural regions where private homes let on such online platforms complement the “thin” infrastructure of accommodation providers (Leick et al., 2022), such as small companies in rural regions (see Ye et al., 2019). The underlying case study of Airbnb hosts in Nordic rural regions demonstrates how private households and incumbent local tourism companies – without any significant investments or developments through policy support – may supply potentially attractive tourism accommodation which satisfies the growing demand of visitors. The analysis presented in this paper provides novel and valuable insights into what factors may determine host professionalisation (Abrate et al., 2022; Casamatta et al., 2022; Sainaghi and Baggio, 2021) and influence their service-quality performance in the eyes of Airbnb users (Lawani et al., 2019; see Xia and Ha, 2023). The use of a broad indicator of “professionalisation” to indicate an entrepreneurial activity on the platform Airbnb is not meant as a normative concept, but shall capture some important characteristics of different actors operating as Airbnb hosts (including potentially aspiring entrepreneurs, see Gretzinger et al., 2018). Thus, the findings of this Nordic case study can be applied to other rural tourist destinations with either existing Airbnb host activities or the potential to develop such hosts, based upon, for instance, abundant natural and recreational amenities.

Importantly, Airbnb is only one popular platform among several national (e.g., finn.no in Norway) or international platforms (e.g., Wimdu, 9flats) that enable short- and long-term homestays and experiences. Furthermore, some hosts might prefer to advertise their rentals without an intermediary, for instance, through local destination management organisations. However, all hosts share similar goals related to their entrepreneurial engagement and comparable restrictions, such as legal restrictions, planning permission or physical constraints to their operations and properties. It is thus highly likely that the lessons derived in this paper on the professionalisation-performance profiles apply beyond the case study presented here. Moreover, these insights on Airbnb hosts may be of relevance to the issue of the performance and professionalism of other micro-entrepreneurship activities in tourism and other sectors (see Huang and Chen, 2021), where our knowledge is fairly limited, and any systematic approaches are difficult to pursue, be it simply due to the lack of data. To generalise these results, it is nonetheless important to note that this study was conducted in specific Nordic rural regions. Therefore, the findings may not necessarily apply to urban areas or other country-contexts. Moreover, while the study provides insights into the different types of Airbnb hosts and their performance in rural regions, it is important to consider other factors that may influence host performance, such as pricing, marketing strategies,

and guest behaviour. Finally, even though the findings point to the role of large versus small tourism companies in rural destinations with the presence of Airbnb, this study did not investigate such factors.

This paper suggests important implications for policy-makers, tourism organisations and Airbnb hosts: firstly, large tourism companies dominate the rural tourism destinations in Denmark, which, at first glance, points to a lack of value appropriation for other local individuals and companies in these destinations on the sharing-economy platform. However, the other rural regions studied seem to represent less competitive local tourism markets, and they offer room for the various entrepreneurial engagement of Airbnb hosts, by both individual households and companies. This might be an argument that speaks against a general regulation of the platform usage in rural tourist destinations, but rather advocates for a temporary regulation of the highly competitive and seasonal local tourism markets. Secondly, there is a potential for micro-entrepreneurship through the use of the Airbnb platform in rural regions, which can generate a competitive advantage for individuals (i.e., private households) based upon a high service quality and customer satisfaction. Supporting the platform engagement of both entrepreneurial individuals and existing local businesses (including tourism companies) in rural regions allows rural dwellers to increase their income, it reduces their emigration to, for example, urban locations and thus keeps potentially aspiring tourism entrepreneurs in the region. Thirdly, the different evaluation of individual versus corporate Airbnb hosts by rural visitors offers important learning points for practitioners: with their self-management of properties, individuals operating as Airbnb hosts might be evaluated more mildly and more independently of their location, whereas corporate actors – i.e., more professionalised hosts in rural regions – meet rather high expectations of their guests – probably similar expectations that other professional accommodation providers will meet. Finally, for tourism organisations, the study provides valuable information on the different host profiles and their potential for promoting sustainable tourism. For Airbnb hosts, the study offers insights into the factors that influence their performance in terms of the service quality delivered to users and the importance of providing high-quality services to guests. Overall, the findings of this study contribute to a better understanding of the dynamics of Airbnb hosting in rural regions and can inform future research on this topic.

6.3. Limitations and future research avenues

The study is limited in several respects, which calls for future research (for instance, as highlighted by Sainaghi, 2021), as also summarised in the last column of Table 7: firstly, a regional case study is presented that is exploratory in nature, based upon various research gaps in the extant literature. Follow-up studies should thus investigate the factors outlined, for example, the motivation of hosts, their nature as professional or non-professional hosts, and their performance, and replicate and/or validate these findings for other rural regions and develop the concepts used in this study. For instance, the qualification of hosts as “Superhosts” by Airbnb should be included, which was not possible within the framework of the present study. In addition, there is a need to study in more depth the threshold between individual households and companies with their quantity of listings and other characteristics in order to verify, challenge, or amend the different host categories identified. In a similar vein, the present study could not control for agents from companies registering as private hosts on Airbnb, and, hence, future research should apply other methods, such as qualitative interviews of hosts, to investigate the possible overlap of corporate agents and individual households as Airbnb hosts. Moreover, further empirical research is needed to understand the specific learning effects for hosts, which could, again, be explored through personal interviews with hosts. The same holds for the property types as a possible factor for the professionalisation and performance of hosts in rural regions, as there exist no prior knowledge about this factor. Moreover, the operationalisation of host performance in terms of this service-quality

performance is a research avenue that deserves future attention. Finally, the host-property distance should be studied in future research on Airbnb hosts and their relations to guests or users in rural contexts, as the results did not point to a clear relationship. Since consumer expectations of Airbnb users differ from their expectations towards traditional accommodation providers, e.g., small hotels and B&B pensions (see Paulauskaite et al., 2017), an extension of this study could compare the professionalisation-performance relationships for commercial Airbnb hosts and conventional hospitality service providers in rural regions and elsewhere.

CRedit authorship contribution statement

Vilhjálmssdóttir Vera: Conceptualization, Investigation, Validation, Writing – original draft, Writing – review & editing. **Gretzinger Susanne:** Conceptualization, Investigation, Validation, Writing – original draft. **Zhang Jie:** Conceptualization, Investigation, Validation, Writing – original draft. **Gunnarsdóttir Guðrún Þóra:** Conceptualization, Investigation, Validation, Writing – original draft. **Mitchell Sara Beth:** Formal analysis, Investigation, Methodology, Software, Validation, Visualization, Writing – original draft. **Leick Birgit:** Conceptualization, Funding acquisition, Project administration, Supervision, Validation, Writing – original draft, Writing – review & editing. **Vinogradov Evgueni:** Data curation, Formal analysis, Validation, Writing – original draft. **Borowiecki Karol Jan:** Conceptualization, Investigation, Validation, Writing – review & editing.

Declaration of Competing Interest

none.

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Appendix A. Supporting information

Supplementary data associated with this article can be found in the online version at [doi:10.1016/j.ijhm.2023.103680](https://doi.org/10.1016/j.ijhm.2023.103680).

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