

Revenue Management Capability and Host Professionalization Degree

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Abstract: This study explores how a revenue management capability can be created by Airbnb hosts and the role played by the professionalization degree, defined as the number of listings managed by a host. The theoretical lenses used by this study is the resource-based. Based on previous studies on revenue management in the field of hospitality, a wide list of routines, skills, know-how and coordination mechanisms are considered to explain how the revenue management capability can be created by a host. In particular, the revenue management process can be segmented into four major components: i) identifying the required information to set the revenue management strategy, ii) taking strategic and then tactical pricing and revenue management decisions, iii) managing the communication and interaction with the guests, and iv) the availability of a software dedicated to revenue management. The study is based on qualitative data collected through interviews in the Milan destination. In line with previous studies, three different groups of hosts were identified: i) single hosts (also called group one), ii) hosts managing 3-5 listings (group two), iii) hosts managing more than 10 listings (group 3). The interviews were recorded, transcribed and coded using the software NVIVO. Results reports strong differences between the three groups of hosts and especially between single and big hosts (those managing ten or more listings). The goals itself are different: while single hosts prefer to select guest and maximize price, big hosts, supporting higher fixed costs, are strongly focused on revenue. All the four blocks are therefore managed in a different way. Small hosts are widely involved in the operating processes (check-in, cleaning, guest interaction) and in many cases the short-term rental is only an additional activity (the main work in another). Therefore, the time dedicated to data collection and revenue management strategy is limited. The opposite is for big hosts that are usually organized as a company with employees specialized per function and with a strong focus on revenue maximization. The paper is supportive for the emerging idea of professionalization degree. The study traces theoretical as well as practical conclusions. The main study limitations are listed.

Keywords: Revenue management capability, Airbnb, Professionalization degree, Individual hosts, Professional hosts

1. Introduction

The large diffusion of the sharing economy and in particular the phenomenon of short-term rentals (STR) has attracted the interest of many supply papers, mainly focused on price/revenue determinants (Sainaghi, 2020). This literature is growing and based on quantitative data has identified many price antecedents and more generally pricing strategies. Size, listing amenities, host variables, accessibility, guest reviews and contractual terms are the main groups of variables used (Sainaghi, 2020; Sainaghi & Chica-Olmo, 2022).

The previous studies agree that host professionalization has an impact on revenue management and pricing strategy. Professional hosts are more oriented on revenue rather than on price maximization (Oskam, et al., 2018). At the same time, some previous articles agree that this quantitative approach is unable to explore why professional host are more efficient and in particular how they are able to create a revenue management capability (Cocola-Gant, et al., 2021). This is the goal of this study, that based on Milan hosts' interviews depicts the links between professionalization degree and revenue management capability creation. The theoretical lenses used by this study is the resource-based view and in particular the capability approach. Resources are the assets that the firm possesses or controls, whereas capabilities refer to the firm's skills in exploiting and combining these resources through organizational routines (Amit & Schoemaker, 1993). Previous studies on hosts suggest the presence of some relevant capabilities, as the preparation of the listing, commercialization, interaction with guests, financial capability (Cocola-Gant, et al., 2021). This study focuses on the commercialization capability, defined in this paper as revenue management capability.

2. Professionalization Degree and Host Performance

Some quantitative studies exploring the price determinants, revealed that professional hosts achieved higher (Chica-Olmo, et al., 2020), lower (Tong & Gunter, 2020) or even marginal positive or negative effects on STR rates. Therefore, professionalization degree appears generating controversial effect on STR price (Sainaghi, 2020). However, these ambiguities are mainly related to the focus on price rather than on revenue. In fact, other quantitative supply studies agree that professional hosts achieve higher revenue than unprofessional hosts (Sainaghi, et al., 2021). The professionalization degree is usually operationalized considering the number of listings managed (Abrate, et al., 2022) eventually integrated with other variables, as experience, type of

listings and year-round availability (Bosma, 2021). While in many studies there is a juxtaposition between professional and individual hosts, recent articles introduced the idea of professionalization degree (Bosma, 2021). In big cities, there are dozens of thousands of hosts. The twofold segmentation (professional and non-professional) appears too simplistic. The reality of the STR hosts is more complex and the boundary between different types of providers is more nuanced. The professionalization degree favoured the recent development of some new type of hosts. For example, the corporate hosts were threefold segmented (Cocola-Gant, et al., 2021), while in the case of marginal hosts some analytic distinctions have been proposed (Semi & Tonetta, 2021) or the hosts' segmentation based on the number of listings managed has been enlarged, distinguishing between single, two listings, three listings, four to ten listings or more than ten listings managed (Sainaghi & Baggio, 2021).

Considering the explorative nature of this study, the professionalization degree in the current paper has been operationalized considering the number of listings managed. Furthermore, the focus was only on host managing an entire apartment or house, excluding shared room providers. This choice is related to the goal of this paper, that is exploring the revenue management capability.

3. Revenue Management Capability

This section identifies which resources can generate a revenue management capability. The resource-based view defines resources as stock of factors that are own or controlled by a company, while capabilities focus on firm ability to use these resources, usually in combination (Amit & Schoemaker, 1993). Resources can be tangible and intangible, human and financial. Following a resource-based view of the firm, the pricing process is considered a capability that combines routines, skills and coordination mechanisms (Dutta, et al., 2003).

Based on previous studies on revenue management in the field of hospitality, a wide list of routines, skills, know-how and coordination mechanisms are considered to explain how the revenue management capability can be created by a host. In particular, the revenue management process can be segmented into four major components: i) identifying the required information to set the revenue management strategy, ii) taking strategic and then tactical pricing and revenue management decisions, iii) managing the communication and interaction with the guests, and iv) the availability of a software dedicated to revenue management.

The first activity focuses on the information necessary to set up the revenue management capability and includes, among others the following resources, skills, and coordination mechanisms: i) data availability, ii) data analysis know-how, iii) benchmarking know-how, iv) demand forecasting know-how. The *availability of data* can support the revenue management process, especially if they are well-organized and simply to access. However, data sometimes are available, but the host has not the skills to use them. For this reason, the *data analysis know-how* is very relevant for the entire revenue management process. Rates should generate a transaction between the landlord and the guest; however, STR providers operate under concurrence. *Benchmarking know-how* is considered an important skill to understand who the most relevant competitors are, to scan their rates and to consider them in the revenue management process. Rates focus on the future transactions, therefore when a host decide the prices should have an idea about the future market condition. This requires a *demand forecasting know-how*, able to consider if the demand is rising or not, if the destination offers some special events, and so on.

The second component can be defined as pricing formulation and is the heart of revenue management capability. It includes mainly the following sub-topics: i) dynamic pricing know-how, ii) revenue rather price maximization focus, iii) multi-channel ability, iv) presence of a revenue manager. *Dynamic pricing know-how* is able to improve the listing revenue, but this pricing strategy generates additional work. In fact, to change continuously price requires knowing the destination seasonal periods, the rates proposed by competitors, the saturation degree of host capacity. Not surprisingly, many hosts prefer to achieve less revenues but avoiding this additional work. Some papers analysing price determinants revealed that professional hosts apply lower rates rather than single-unit hosts, or, more generally, the relationship between commercial host and price is controversial (Sainaghi, 2020). However, other studies shown an interesting relationship, professional hosts achieve higher revenue, rather than mom-and-pop providers. Said differently, what really changes comparing professional and single-listings providers is a different focus. While single providers search *price maximization*, professional hosts are more interested on *revenue maximization*. To improve the listing revenues, the hosts can use (simultaneously or not) more than one channel. In the study of corporate hosts, three main platforms are used: Airbnb, Booking.com and VRBO (Cocola-Gant, Jover, Carvalho, & Chamusca, 2021). *Multi-channel ability* is therefore needed, including the ability to set-up the rates for the different platforms, to avoid rate disparity or overbooking. Finally, the presence of a *revenue manager* or a host with a background in this field

represents a crucial point, able to change and improve the entire revenue management activity. The revenue manager can be an external consultant that support the host (Cocola-Gant, et al., 2021).

The third component focuses on managing, communicating, and interacting with the guests. The skills, resources and routines are many. In this study we focus on. i) ability to interact with potential clients and ii) reputation. The *ability to interact with potential clients* plays a pivotal role. As confirmed by some quantitative studies, response rate and time positively affects the listing results, as well as the number of photos published (and their quality). Moving to *reputation* some items refer to the number of reviews collected by the listing, the overall rating, the presence of superhost badge, the host experience.

Finally, a coordination mechanism is introduced and is the presence of a *revenue management software*. The availability of a revenue software plays a crucial role. In fact, all the items previously identified are influence by the software – for example the software can store data, can support benchmarking activity, demand forecasting, defining and dynamically adjusting the price, but can also help the host to quick respond to potential guest or managing some reputation indicators.

4. Methodology

Considering the explorative nature of this research, a qualitative approach based on interviewees was adopted, in line with some recent papers focused on STR hosts (Cocola-Gant, et al., 2021). These studies usually realize 30-40 interviewees mainly on Airbnb hosts, using semi-structured questionnaires (Bosma, 2021). When saturation is achieved, the authors report the main findings using quotations and typically describing categories (as different types of hosts). The same approach was used in the current study.

The sample was extracted by the AirDNA database from Milan. Milan is the second leading Italian destination after Rome and attracts different targets, as business, leisure and trade fair. Focusing on this last segment, Fiera Milano organizes dozens of events (Sainaghi & Mauri, 2018). Therefore, in the Milan city there are continuous change in off- and on-pick (Sainaghi, et al., 2018), constituting an ideal setting for exploring the creation of a revenue management capability (Sainaghi, et al., 2018).

As typical for qualitative research, a polar approach was adopted in this study, in order to understand how the professionalization degree can help the emergence of a revenue management capability (Eisenhardt, 1989). In line with previous studies, three different groups of hosts where identified: i) single hosts (also called group one), ii) hosts managing 3-5 listings (group two), iii) hosts managing more than 10 listings (group 3). The host segmentation based on listings managed was used in some previous studies (Deboosere, et al., 2019; Sainaghi & Baggio, 2021). Only hosts managing entire apartment/house were considered. The final sample includes 27 interviews: interviews numbered 1-11 for single hosts, interviews numbered 12-20 for 3-5 listings and interviews numbered 21-27 for hosts managing more than 10 listings. All the interviews were recorded, transcribed, and coded using NVIVO software.

5. Findings

5.1 Information and Data Analysis Skills

The code *data availability* illustrates some relevant differences moving from single to multiple hosts. Single host usually do not have a dedicated register with all the past data; they use the repository offered by Airbnb but mainly for fiscal and administrative purposes. “The archive is used only for personal information and documentation for any checks, including for tax purposes” ... “I don’t consider the historical archive important for formulating prices” (interview #5). The opposite is for big hosts (group 3). “The reservation archive is entered in the PMS (Property Management Systems). The data is analysed directly by the system. The historical data are our starting point for defining the future rates” (interview #22). The second group oscillates between hosts that do not consider very relevant the historical data and others that invest more time and attention. The threshold is again the presence or not of a software. “It has a historical archive of reservations, which can be consulted in the company management system. The software proposes the prices charged in the past and the occupancy rate. The wheelbase data is very useful for orienting the tariffs to be applied” (interview #18).

Data analysis know-how is the second code. Many hosts of the first group invest limited time for analyzing data. “Historical data is not used to formulate prices” (interview #9) or “I have a historical archive of bookings, but it doesn’t seem very important to me and then it’s complicated to extract the information” (interview #11). Again, the approach of the third group appears the opposite. Thanks to the software, the data process

analysis is simple, fast, and is made periodically. “We collect a lot of data: past sales data, competitors’ prices, offers near our apartments, events, weather (it’s not the same thing as a sunny weekend or a rainy one). Thanks to the software we can combine all this data on one platform and examine it easily. We regularly set aside time for this activity” (interview #22).

Benchmarking know-how is perceived an important activity during the start-up by the single host. “I spent a lot of time for benchmarking activity at the start-up of my business. Currently I dedicate about an hour a month” (interview #3). Some hosts affirm the relevance of benchmarking however they have not time enough to do this activity. “I’m aware about the importance of benchmarking. It would be useful to do so but I have not the necessary time to dedicate to it” (interview #9). For the second group, benchmarking is an ordinary activity perceived relevant. “I look on Airbnb and Booking what are the prices in the area and the services that are offered. This activity is useful for defining prices and it requires at least ten hours a month” (interview #19). Big hosts (group three) declare the strategic relevance of benchmarking. “I constantly look at the websites of competitors, I observe their prices, I consider the quality of their listings, the area. This continuous observation helps me a lot in changing the price frequently. I certainly dedicate a lot of time to this activity which is one of the most important” (interview #21). “I dedicate at least an hour a day to this activity. It is essential for my work” (interview #24).

Concerning *demand forecasting know-how*, the city of Milan is registering a strong turnaround after the Covid. The demand is growing, and the consumer behaviour patterns are changing. For this reason, some hosts (small and big) consider unpredictable the demand. “After the pandemic there is an incredible demand” (interview #13). “The prices we are practicing from May 2022 onwards are very high compared to the past. There is a boom in requests” (interview #24). “After the pandemic, the seasonality of Milan has changed: there is almost always a very high demand” (interview #27). With this premise, small hosts are not able to predict the tourism demand. “I wouldn’t know how to predict the number of customers or even what data I could use” (interview #4). The second group forecasts demand considering the Milanese seasonality. “Thanks to the calendar of events in Milan, I am able to roughly predict the number of customers” (interview #17). The professional hosts (group three) use mainly the software and the number of requests/reservations. “To predict potential demand I use price lab, a module of our revenue management software” (interview #22). “The intensity of the requests we receive, together with the reservations made well in advance, help us to estimate the expected demand” (interview #27). The availability of historical data are also very important for demand forecasting. “We predict demand based on our experience and the historical data (the company is 12 years old)” (interview #25).

5.2 Pricing and Revenue Management Decisions

This second group of activities and routines played a crucial role for understanding the role of professionalization. *Dynamic pricing know-how* is probably a key threshold between small and big Airbnb providers. Single hosts tend to use one static price or to articulate the rates in few classes of price. “For my apartment, I consider a price of €80 to be optimal” (interview #1). “I set the price 10 years ago and have broadly held it constant” (interview #3). “Prices from the apartment are always quite similar” (interview #4). “If we take a year as a reference, I use 2 or 3 different prices” (interview #5). The second group abandons the static price and uses a deeply price discrimination. “The prices of the apartments during the course of the year are differentiated mainly when there are events” (interview #17). Furthermore, the price variation increases. “Within a year, I use about four significantly different prices” (interview #18). Big hosts enlarge the price discrimination or adopt a dynamic pricing approach. “In a year I use at least 6-7 different prices and then further changes are made within them” (interview #26). “I don’t use price ranges but continue to rebalance rates based on demand. The dynamism of the price is guaranteed by the daily observation of the market” (interview #21). “Every day I apply a different price. We do the same work that hotels do” (interview #22).

Concerning *revenue or price maximization* focus the interviews confirm important differences among the groups. Single hosts are more oriented on price. “For me it is more important to have a high price rather than higher revenues” (interview #3). “I prefer to have a high price and less reservations” (interview #6). Sometimes a higher price is perceived as a useful tool to select guest and avoid problems. “Lowering prices would bring disrespectful people to my house who are different from my target” (interview #15). The quote, despite focusing on the second group of hosts emerges in many single host interviews. Again, big hosts show a completely different approach. “Our revenue management system helps us fill apartments at the optimal price. Every unsold night is a loss of revenue” (interview #22). “We have fixed costs to cover, which is why it is more important to generate high revenues” (interview #24).

Big host show a clear *multi-channel ability*. “To sell apartments, I use many different portals: Airbnb, Booking, Expedia, TripAdvisor, Trivago, HomeAway, VRBO, casavacanza.it, Home Togo and others. The most efficient channels are Booking and Airbnb” (interview #22). The presence of a channel management software plays a pivotal role. “Multi-channel is managed through a management system called “cross booking”, a channel manager” (interview #24). Some hosts have dedicated employees responsible for this activity. “Multi-channel is managed through a channel manager and the people in charge of booking” (interview #24). Also, many hosts of the second group show a multi-channel ability. “To sell apartments, I use Airbnb, Booking and our site” (interview #12). However, the prevalent focus is on Airbnb. “Booking generates more traffic, but I prefer working with Airbnb because these customers are much more polite. They have the idea that they come to my house, and they have respect” (interview #12).

Moving to *presence of a revenue manager*, the first two groups are not big enough to have a dedicated person in staff. “I formulate the prices” (interview #3). “I’ve never felt the need to have external support or a dedicated figure to formulate the prices” (interview #12). Some big hosts have a revenue manager in their staff. “The prices are formulated by the staff who take care of the booking and are familiar with the principles of revenue management” (interview #24). Nearly all hosts in group three have attended price training, while hosts in groups one and two report the opposite.

5.3 Guest Communication and Interaction

The *ability to interact* with potential clients is a crucial activity for Airbnb hosts. Single hosts usually are enthusiastic to have a personal relationship with guests. In fact, these hosts are involved in many operating activities, as check-in, cleaning service (sometimes with the support of collaborators), and guest assistance. “I personally welcome my guests upon check-in” (interview #2). “The interaction with the potential customer is very intense. I also like to provide information about Milan. It’s more of a friendly relationship than a professional one” (interview #5). The answers are similar for hosts belonging to the second group. By contrast, in the third group the interaction is partially mediated by the employees and collaborators, on one side, and technology, on the other. “We have digitized the entire check-in process, thanks to digital locks” (interview #22). “Our company has eight employees. We also make use of external collaborators. Check-in is done by our staff” (interview #25). Response rate and response time is very efficient for all the hosts, without significant differences concerning the number of listings. In the interaction process the listing photos are considered very relevant. While single hosts prefer to realize by themselves the pictures, big hosts (group three) use more intensively professional photographers. “I’ve realized the photos by myself. I’d like to change them and have better quality images, but I’ve never trusted a professional photographer” (interview #2). “The photos used on the platforms are not changed often. However, if an apartment does not sell as it should, we intervene, perhaps even just changing the order and putting the most beautiful as the first photo. The photos were taken by a professional photographer who specializes in interiors” (interview #22). Another important difference between the host groups concerns the guest selection. Single hosts are more sensitive to select their guests and to avoid problems. “I do everything by myself. I host people in my house, and I want to know who comes” (interview #1). “I no longer use Booking because customers arrive who think they are in the hotel and therefore leave dirt, break objects and say nothing” (interview #12). Host belonging to the third group usually adopt instant booking and therefore do not select their guests. “We spend little time interacting with the customer before booking as we have adopted the instant booking system” (interview #22).

The second item is *reputation*. Hosts consider very important the reviews, more the score than the number. Reviews are so relevant that some Airbnb providers, during the start-up, prefer to apply cheap price to attract many guests and collect reviews. “During the first four months we applied very low prices. It has served to have a greater number of reservations and therefore increase the number of reviews. Once we reached a reasonable number, we were able to increase the prices” (interview #6). “Reviews are a key element in building trust to the listing” (interview #12). A difference among hosts emerges considering the ability of reviews to guide listing and service improvements. Host belonging to the first two groups usually have a strong and personal interaction with guests. Therefore, they are able to intervene when problems arise. “Weaknesses almost never emerge from the reviews because I intervene promptly during the stay when problems arise” (interview #14). By contrast, big hosts use more intensively reviews for identifying problems. “I happened to intervene on weaknesses that emerged from the reviews: for example, if it happens several times that they tell me that the apartment is too hot, I try to boost the air conditioning” (interview #22). The majority of big hosts have reported concrete examples of improvements introduced thanks to the reviews. Another important difference regards the time dedicated analysing the reviews. While small hosts affirm only to quickly read the

reviews – “I spend little time analysing the reviews” (interview #4) –, large hosts invest more time. “Every time I check out, I scan the reviews. They help me understand how each apartment is positioned” (interview #21).

5.4 Revenue Management Software

The presence of software has a strong influence on the entire pricing process. Single hosts do not use software and Excel file. The support provided by the Airbnb platform is enough. Not surprising the multi-channel approach is not used and prices are mainly static or basically discriminated. By contrast, the third group of hosts largely adopt a software, mainly related to the benchmarking and pricing activity.

6. Conclusions

Focusing on theoretical conclusions, the study supports the host classification in three proposed groups. The first threshold is one and the second is around ten and support the idea of professionalization degree. The rising number of managed listings, in fact, require a progressive creation of a firm, with employees and external collaborators, rising the fixed costs. By contrast, single host are widely involved in the operating activities (usually they realize everything by their self), are less skilled, especially in providing and using information to orient the pricing. Furthermore, the goals are different. Small hosts are more interested to select their guests and to preserve the listing. Therefore, they prefer maximizing price rather than revenue. Big hosts are organized as company, with employees and fixed costs. Therefore, they are “number” driven, researching more volume and revenue than price. Second, the four theoretical blocks used to understand the revenue management capability are relevant in explaining why and how the professionalization degree is able to change the pricing process.

The study is reach of possible empirical implications for Airbnb hosts and more generally for people involved in short-term rentals. The four blocks and sub-blocks provide concrete examples about the pricing formulation.

The main study limit is the space constraint that limited the findings. For this reason, the article reports only the pricing components without providing the “overall picture” (how the four blocks and the sub-topics interact). By contrast the number of interviews is not perceived a limitation. In fact, there is a high overlapping between the interviews (especially for host pertaining to group one and two) and saturation is quickly reached. Said differently, additional interviews tend to repeat the same items.

References

- Abrate, G., Sainaghi, R. and Mauri, A. G. (2022) “Dynamic pricing in Airbnb: Individual versus professional hosts”, *Journal of Business Research*, Vol 141, pp 191-199.
- Amit, R. and Schoemaker, P. J. H. (1993) “Strategic assets and organizational rent”, *Strategic Management Journal*, Vol 14, No. 1, pp 33-46.
- Bosma, J. R. (2021) “Platformed professionalization: Labor, assets, and earning a livelihood through Airbnb”. *Environment and Planning A: Economy and Space*, Vol 54, No. 4, pp 595-610.
- Chica-Olmo, J., González-Morales, J. G. and Zafra-Gómez, J. L. (2020) “Effects of location on Airbnb apartment pricing in Málaga”, *Tourism Management*, Vol 77, 103981.
- Cocola-Gant, A., Jover, J., Carvalho, L. and Chamusca, P. (2021) “Corporate hosts: The rise of professional management in the short-term rental industry”, *Tourism Management Perspectives*, Vol 40, 100879.
- Deboosere, R., Kerrigan, D. J., Wachsmuth, D. and El-Geneidy, A. (2019) “Location, location and professionalization: a multilevel hedonic analysis of Airbnb listing prices and revenue”, *Regional Studies, Regional Science*, Vol 6, No. 1, pp 143-156.
- Dutta, S., Zbaracki, M. J. and Bergen, M. (2003) “Pricing process as a capability: A resource-based perspective”, *Strategic management journal*, Vol 24, No. 7, pp 615-630.
- Eisenhardt, K. M. (1989) “Building Theories from Case Study Research”, *Academy of Management Review*, Vol 14, No. 4, pp 532-550.
- Oskam, J., van der Rest, J. P. and Telkamp, B. (2018) “What’s mine is yours—but at what price? Dynamic pricing behavior as an indicator of Airbnb host professionalization”, *Journal of Revenue and Pricing Management*, Vol 17, No. 5, pp 311-328.
- Sainaghi, R. (2020) “Determinants of price and revenue for peer-to-peer hosts. The state of the art”, *International Journal of Contemporary Hospitality Management*, Vol 33, No. 2, pp 557-586.
- Sainaghi, R., Abrate, G. and Mauri, A. (2021) “Price and RevPAR determinants of airbnb listings: convergent and divergent evidence”, *International Journal of Hospitality Management*, Vol 92, 102709.
- Sainaghi, R. and Baggio, R. (2021) “Are mom-and-pop and professional hosts actually competing against hotels?”, *International Journal of Contemporary Hospitality Management*, Vol 33, No. 3, pp 808-827.
- Sainaghi, R. and Chica-Olmo, J. (2022) “The effects of location before and during COVID-19: Impacts on revenue of Airbnb listings in Milan (Italy)”, *Annals of Tourism Research*, Vol 96, 103464.

- Sainaghi, R. and Mauri, A. (2018) "The Milan World Expo 2015: hospitality operating performance and seasonality effects", *International Journal of Hospitality Management*, Vol 72, pp 32-46.
- Sainaghi, R., Mauri, A. and d'Angella, F. (2018) "Decomposing seasonality in an urban destination: the case of Milan", *Current Issues in Tourism*, Vol 22, No. 16, pp 1919-1924.
- Sainaghi, R., Mauri, A., Ivanov, S. and d'Angella, F. (2018) "Mega events and seasonality: The case of the Milan World Expo 2015", *International Journal of Contemporary Hospitality Management*, Vol 31, No. 1, pp 61-86.
- Semi, G. and Tonetta, M. (2021) "Marginal hosts: Short-term rental suppliers in Turin, Italy", *Environment and Planning A: Economy and Space*, Vol 53, No. 7, pp 1630-1651.
- Tong, B. and Gunter, U. (2020) "Hedonic pricing and the sharing economy: how profile characteristics affect Airbnb accommodation prices in Barcelona, Madrid, and Seville", *Current Issues in Tourism*, Vol 25, No. 20, pp 3309-3328.