Sharing economy: The relationship between Airbnb, the accommodation industry and new touristic flows

Assessing the relationship between Airbnb, the professional accommodation industry and the activation of new tourist flows - The case of Bologna metropolitan area (Italy) –

Extended Abstract

The aim pursued by the study here summarized is to get to a determination of the *magnitude of the phenomenon of sharing economy* and *its different components* for the territory of the metropolitan city of Bologna. The study opens with the analysis of what are the *features* of the *proper sharing-economy* in order to verify the correspondence between them and the different situations encountered during the analysis.

The above introduced features are 1) the shift of users' interest *from ownership to use* of goods and services; 2) the collaboration between peers (*peer-to-peer cooperation*) to allow the use of goods and services and, in the end, 3) the use of *collaborative platforms* equipped with feed-back systems that allow to *extend the collaboration between peers* outside the groups where it is typical (families, friends and various kind of associations).

The data provided by AirDNA[1] and processed by Unioncamere Emilia-Romagna allow to carry-out an in-depth analysis on this portal which, although not the only one active in the Bologna area, is generally considered the one capable of developing more traffic for the touristic structures retrievable on it.

The analysis shows a noticeable increase in the phenomenon, which reaches almost 30 million euro in turnover estimated in 2017, from 6 million euro in 2015 (+ 388%). Also the number of rooms involved in the phenomenon has always increased, reaching 7,110 units estimated in 2017 (+ 147% from 2015).

Data relating to structures advertised / bookable on the Airbnb portal located for the metropolitan city of Bologna.

	Bookable facilities	Averege booked nights per year	Total booked nights per year	Total turover per year	Average turnover per facility per year	Average rate for one night	% var. of average rate	Number of rooms involved (esteem)	Number of room-nights booked each year (esteem)
2015	2.227	41	92.210	€ 6.117.421	€ 2.747	€ 66,34	n.d.	2.878	115.674
2016	4.247	59	252.507	€ 17.185.413	€ 4.046	€ 68,06	2,6%	5.408	317.432
2017	5.494	74	406.633	€ 29.863.918	€ 5.436	€ 73,44	7,9%	7.110	521.218

Source: Centre for economic research, Unioncamere Emilia-Romagna (Italy) on data provided by AirDNA.

In order to compare correctly the hotel hospitality with the one intermediated by Airbnb, it is necessary to compare the room-nights generated by the two kinds of touristic-structures. In 2017, the last year of availability of data from Istat[2] for hotel structures (number of rooms available and occupancy rate), the structures on Airbnb generated one booked room-night every 5.5 nights booked in hotels. The same value calculated in 2016 was 9.7. *In a single year,*

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1 A company that deals with finding and marketing data related to the Airbnb platform (using artificial intelligence data-harvesting algorithms).

2 ISTAT is the official Italian Statistics Bureau.

therefore, *the incidence of Airbnb on (proper-hotel) accommodation industry in the metropolitan city of Bologna has, in essence, doubled*.

The, just made, direct comparison between the hotel facilities and the total of those on Airbnb is only partially correct because very different structures are retrievable on every tourist sharing-economy portal. The structures on the platform can be, in fact, divided into three different macro-types: *entire-houses*, *single-rooms* in shared apartments and *beds* in shared rooms. Within the entire-houses, a specific sub-category is identifiable that allows privacy levels and kinds of use very similar to the ones grated by hotel-rooms: they are the whole-houses with one bedroom or those consisting of studios. So, these entire-homes are called *"hotel comparables"* and weigh *1/3 on the total number of structures*, although representing *44% of the estimated turnover* (over 13 million euro) of the platform for Bologna. This discrepancy is due, above all, the *very high number of bookable nights* (almost 20 nights per month).

Data relating to "hotel-comparable" structures advertised / bookable on the Airbnb portal for the metropolitan city of Bologna.

	Bookable facilities. Average monthly data	Booked facilies. Average monthly data	Bookable facility-nights	Booked facility-nights	Net utilization rate	Total turover USD	Average daily rate USD
2015	500	315	88.962	42.602	47,9%	$3.455.479	$81,11
2016	842	618	191.078	105.499	55,2%	$8.445.565	$80,05
2017	1.224	971	301.177	173.584	57,6%	$14.778.798	$85,14

	Total turnover EUR	Average daily rate EUR	Average turnover per bookable facility	Average turnover per booked facility	Average bookable facility-nights per month	Average booked facility-nights per month
2015	€ 3.113.041	€ 73,07	€ 6.222	€ 9.870	14,8	7,1
2016	€ 8.445.565	€ 80,05	€ 10.030	€ 13.673	18,9	10,4
2017	€ 13.108.498	€ 75,52	€ 10.712	€ 13.497	20,5	11,8

Source: Centre for economic research, Unioncamere Emilia-Romagna (Italy) on data provided by AirDNA.

Also for the "hotel-comparable" structures, it is advisable to compare facilities brokered by Airbnb and hotel structures only through the comparison between the room-nights generated by the two kinds of structures. This comparison shows that, for the metropolitan city of Bologna in the year 2016, Airbnb had generated one booked room-night every 29.1 room-nights generated by hotels. This value has fallen to 16.6 in 2017. So, also in the case of "hotel-comparable" structures, *the incidence of Airbnb on hotel accommodation industry has, in essence, doubled in just one year* (although with very different absolute value).

While "hotel-comparable" structures are considered for the kind of relationship they have with hotels (of almost-direct competition), entire-house structures ("entire-places") are interesting because, to be rented entirely, they must be uninhabited - at least for the nights for which it is declared the availability to rent. If this availability is permanent, or semi-permanent, these houses *are managed in a semi-professional or professional manner*, raising doubts about the collaborative nature of the relationship between the parties involved in the transaction (the collaboration between peers excludes - by definition - the presence of a professional supplier). The "entire place" structures are less than 56% of the facilities retrievable on the platform but *represent 80% of the total estimated turnover (over 23.9 million euro)* for Airbnb in Bologna.

Data about "entire place" accommodation facilities on Airbnb portal located in the Bologna metropolitan area.

	Bookable facilities. Average monthly data	Booked facilies. Average monthly data	Bookable facility-nights	Booked facility-nights	Net utilization rate
2015	815	481	136.667	60.373	44,2%
2016	1.398	975	303.790	164.461	54,1%
2017	2.011	1.535	478.726	262.652	54,9%

	Average bookable facility-nights per month	Average booked facility-nights per month	Total turnover EUR	Average daily rate EUR	Average turnover per bookable facility	Average turnover per booked facility
2015	14,6	6,5	€ 4.878.522	€ 80,81	€ 5.988	€ 10.148
2016	18,0	9,3	€ 13.396.885	€ 81,46	€ 9.585	€ 13.736
2017	19,7	10,8	€ 23.928.492	€ 91,10	€ 11.900	€ 15.589

Source: Centre for economic research, Unioncamere Emilia-Romagna (Italy) on data provided by AirDNA.

The analysis of *"entire-place" that are not "hotel-comparable"* can be very interesting. These touristic structures are entire homes that have two or more bedrooms and this make them quite substantially different from hotels in terms of granted levels of privacy, in terms of costs per person and, as a consequence, in terms of the type of travelers involved (large groups and families). The turnover of this type of structures can be estimated as a difference between that of "entire-places" and the one of "hotel-comparable". In the case of the metropolitan city of Bologna, in 2017, this turnover amounted to around 10.8 million euros *equal to 36% of the total Airbnb phenomenon*. Since these facilities meet rather different needs than those satisfied by hotel-rooms, it can be argued that they are not in direct competition with them, *thus generating potentially incremental flows for local tourism*.

The fact that the average monthly number of nights available for these facilities has almost reached 20 units suggests that at least a part of them are kept free to be *permanently used as described*, thus embodying, as anticipated, the requirement of *professional management*.

On the other side, it is - then - possible to isolate *the "core" of the properly-sharing activities*. These are touristic structures that provide, by their very nature, forms of sharing in terms of space and time with the habitual inhabitants (it is therefore about private-rooms in shared apartments or beds in shared-rooms). The estimate of the turnover of these structures is obtained by the difference between the total estimated collection and the one related to entire homes: this is about *6 million euro, a fifth of the total of the platform*.

Clearly, not all of the structures that do not fit into this "core" are outside the properly-sharing economy. This is the case of entire-places occasionally short-term rented like, for example, second homes for the holidays or temporarily un-inhabited houses (waiting for the outcome of an inheritance procedure, or a sale one, or homes left empty by temporary moving to other cities of habitual inhabitants). Therefore, the quantification just carried out stops at the "core" of the properly-sharing activities, thus constituting a quantification by default.

Summarizing what has emerged so far, it is possible to make a *schematic quantification of the incidence of the different phenomena that co-exist on Airbnb*:

a) *20% of the proceeds* are related to the "*core" of the properly sharing activities*;
b) The remaining *80% of collections* are related to structures that, in many cases, give rise to the doubt of professional management of the activity (and are, therefore, *potentially out of sharing-economy*);
c) *44% of turnover* (part of the 80% referred to in point b) relates to touristic structures that *exert an almost-direct form of competition for hotels*;
d) *36% of the proceeds* (as well part of the 80% referred to in point b) are related to structures that, with a greater degree of probability, *generate incremental flows for local tourism*.

The sharing economy in different territorial frames: the change in use of towns' historical centres

In the economically marginal areas, the permanence of resident population - in the face of the scarcity of economic opportunities - is possible only with forms of *income integration* that make it possible, as example, to profit from those buildings that don't have economically attractive use. This necessity of residents, moreover, meets the needs of *new tourisms,* increasingly looking for *authentic experiences* outside the most beaten paths, featured by *direct contact with nature and/or local populations*. In these territorial frame, the tourist sharing-economy produces its best fruits integrating the increase of income for resident population and the tourist fruition for those territories that do not attract enough tourists to justify the investment in hotel facilities. Thanks to sharing options, the tourist development of these territories meets the needs of *experiential tourism* that requires sharing time and space with local communities.

The situation is potentially very different in towns or, more generally, in all those territorial frames in which the properties can be used to various economically attractive purposes. A phenomenon of considerable interest, in fact, is the *potential change of economic and social use* of entire areas of tourist towns as a consequence to the spread of sharing economy portals. In the case of some Italian cities (for example, Matera and Florence) it has been estimated that a significant percentage of the properties of the historic center (respectively, 25.3% and 17.9% in 2016) is already rentable on Airbnb. In the case of Bologna, this percentage is still low (2.4% in 2016) but is significantly increasing (+ 140% in 2016).

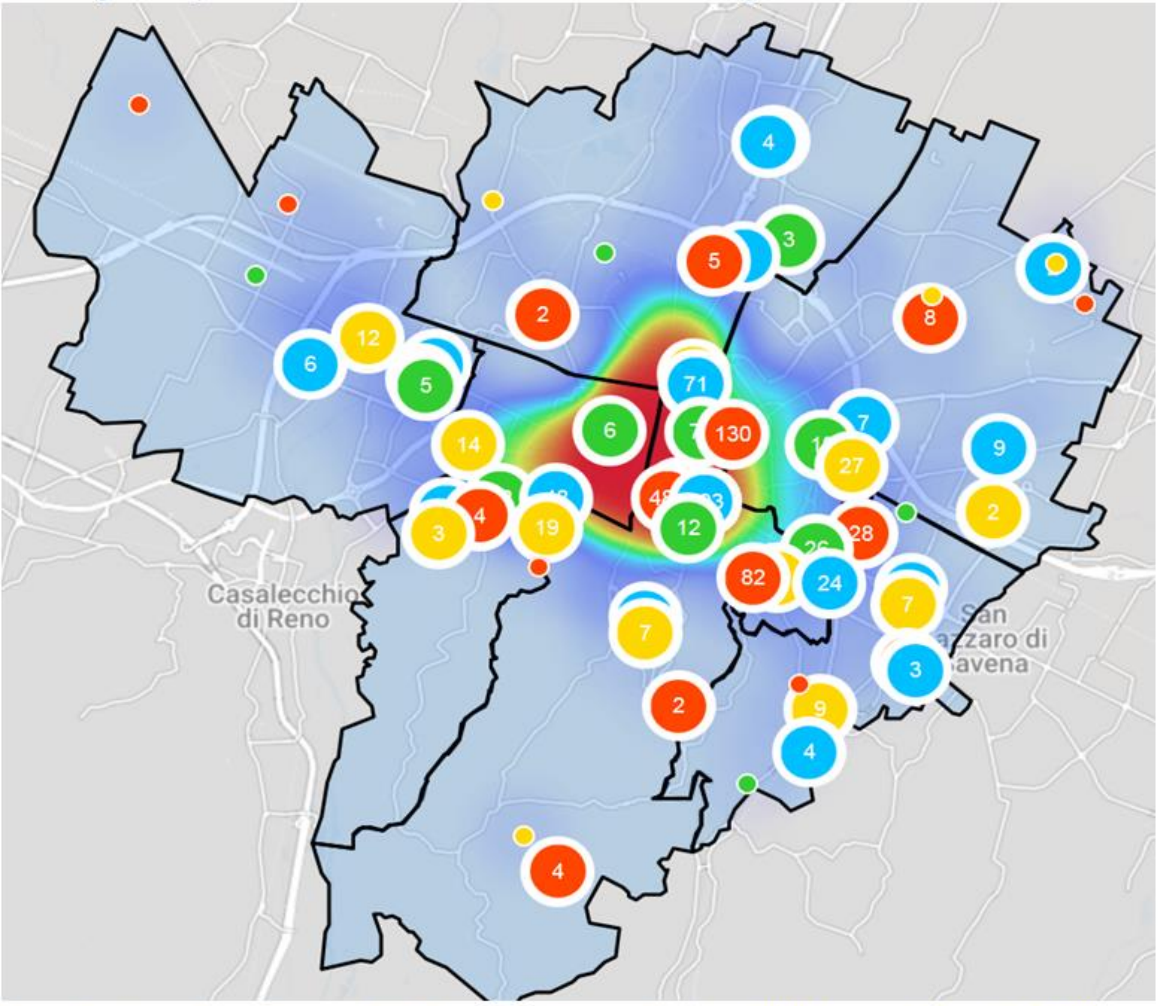
Adopting a typical terminology of the economic discourse, it's possible to say that towns' areas with the greatest tourist vocation, typically the historical centres, are witnessing an increasing "*displacement of the continuous inhabitants*" (be they residents, students or workers off-site) in favor of travelers accommodated in short-term facilities. The "*economic premium" for the transition to the short-term rental* of buildings, in fact, is particularly high for the central areas of towns pushing the owners towards short-term rentals for tourism purposes. The study analyzes the different types of short and long-term rent management, highlighting the yield in different parts of Bologna metro-area with very high levels in central Bologna.

Percentage of real estate assets of historic centres offered on Airbnb

City	% Housing stock 2015	% Housing stock 2016	Variation 2015-2016
Bari	0.80%	1.00%	25.00%
Bologna	1.00%	2.40%	140.00%
Catania	1.40%	2.20%	57.10%
Firenze	11.10%	17.90%	61.30%
Genova	0.60%	1.00%	66.70%
Matera	17.30%	25.30%	46.20%
Milano	1.70%	3.60%	111.80%
Napoli	1.00%	3.10%	210.00%
Roma	7.10%	8.00%	12.70%
Siena	2.50%	4.00%	60.00%
Torino	1.00%	2.80%	180.00%
Venezia	6.10%	8.90%	45.90%
Verona	2.20%	4.10%	86.40%

Source: "Airification" delle città: uno studio sull'impatto degli affitti a breve termine", University of Siena (Italy). From "Il Sole 24 Ore"

The coloring of the map is as warmer as the concentration of structures on Airbnb is greater



Source: Monitoring of Airbnb, November. 2017. Municipality of Bologna's Open data: http://dati.comune.bologna.it/node/3088

Final remarks

The study has highlighted the different phenomena that co-exist within the sharing economy portals and the weight they have on Airbnb turnover. Moreover, the study has illustrated the different impacts on urban and not-urban territorial frames.

The sharing-economy in tourism has a remarkable scope that has only begun to show its potential and its effects. It is reasonable to expect that there will be no trend reversals in the foreseeable future, so the sharing-economy - in tourism as in other economic sectors - has come to stay and, therefore, must be managed.

A unique solution to avoid distortions has not yet been found. Radical technological innovations that take the form of radical economic and social innovations require adequate measures to protect the society from the externalities they produce, even to the detriment of themselves.

It is not easy but It is certainly necessary.

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Essential biography:

Cristina Caniperi, "Airification" delle città: uno studio sull'impatto degli affitti a breve termine in Italia, Università di Siena – Il Sole 24 Ore del 13/06/2017

European Parliament (2017), Tourism and the sharing economy, http://www.europarl.europa.eu/RegData/etudes/BRIE/2017/595897/EPRS_BRI(2017)595897_EN.pdf

European Parliament (2016) A European agenda for the collaborative economy
http://www.europarl.europa.eu/RegData/etudes/BRIE/2016/593510/EPRS_BRI(2016)593510_EN.pdf

YJ Heo (2016), Sharing economy and prospects in tourism research, Annals of Tourism Research: https://www.sciencedirect.com/science/article/abs/pii/S0160738316300123

Monica Gilli (2016), Turismo ed identità, Liguori editore

Nadler S. (2014), The sharing economy: what is it and where is it going?, Massachusetts Insitute of Technology http://dspace.mit.edu/handle/1721.1/90223

A cura di Marta Mainieri di Collaboriamo.org e Ivana Pais di Unicatt Trailab, Sharing Economy: la mappatura delle piattaforme italiane, http://www.collaboriamo.org/risorse/sharing-economy-e-italia-la-mappatura-delle-piattaforme-italiane-2016/

Elisa Vaccari (2016), Sharing economy come opportunità per il settore turistico, Venezia, Ca' Foscari.

Georgios Zervas, Davide Proserpio, and John W. Byers (2017), The rise of the sharing economy: Estimating the impact of Airbnb on the hotel industry, Journal of Marketing research.