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Airbnb 2.0: Is it a sharing economy platform or a lodging corporation?

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Airbnb 2.0: Is it a sharing economy platform or a lodging corporation?

Abstract

Research on Airbnb has provided significant evidence that it has an adverse impact on hotel

performance. However, the impact of a more recent Airbnb-related phenomenon that remains

under-explored is the increasing *professionalization* of Airbnb and the prevalence of *multi-unit*

hosts who offer more than one listing on the platform and are typically more dynamic in terms of

issues like managing inventory and providing more standardized experiences. This

professionalization begs the question of whether Airbnb should be considered a sharing economy

platform or a lodging corporation (Airbnb 2.0). To answer this question, the present study

identifies which types of Airbnb properties (entire homes, private rooms, or shared rooms) and

host structures (single- or multi-unit hosts) are the biggest threats to traditional lodging

companies in the U.S., and which states are most affected by the presence of Airbnb. The

findings have significant implications for researchers and many practitioners associated with the

phenomenon.

Keywords: Airbnb; Airbnb supply; multi-unit hosts; Airbnb market share; hotels.

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1. Introduction and Background

Recent research has often been concerned with Airbnb's effects on the lodging industry at the aggregate level (e.g., Dogru, Mody, & Suess 2019; Zervas, Proserpio, & Byers 2017). While such research has been useful in demonstrating Airbnb's adverse impact on hotel performance, ignoring the nuances of Airbnb's products, hosts, and market concentration fluctuations limits the understanding of the nature of Airbnb as a company and the implications of its growth for a variety of stakeholders. At its inception, Airbnb was a P2P sharing platform, with most hosts/providers renting out a single property. However, Airbnb's growth over the last 3-4 years has been stimulated by providers who offer multiple units on the platform, often within the same building or local area. These multi-unit hosts are contributing to what is seen as the professionalization of Airbnb, which we refer as Airbnb 2.0. In the case of multi-unit hosts, there are fewer differences between the Airbnb host's product offering and that of the nearby hotel that also offers individual rooms within a single building. In effect, it is reasonable to view these Airbnb units as hotels that are selling their inventory on Airbnb's platform. The purpose of the present study is to (1) identify which types of Airbnb properties (entire homes, private rooms, or shared rooms) and host structures (single or multi-unit hosts) represent the biggest threats to traditional lodging organizations and (2) to identify which states are most affected by the presence of Airbnb.

2. Methodology

The sample for this study comprises the fifty states in the United States and the District of Columbia for the 12-month period between November 2017 and October 2018. Hotel room supply, room demand, room revenue, average daily rate, occupancy rate, and revenue per

available room (RevPAR) data were provided by Smith Travel Research. Airbnb data were obtained from AirDNA.

We created a variable, RevPAL (or revenue-per-available-listing), to measure the amount of revenue that a single Airbnb listing generates. RevPAL is identical to RevPAR; however, in the context of Airbnb, what comprises a room may be confusing since Airbnb units comprise entire homes with multiple rooms, private rooms, and shared rooms. Thus, we calculated RevPAL as total revenue divided by the total number of listings on Airbnb.

We also separated Airbnb units into four categories of host structure based on quartiles determined by the number of units a host had listed. We also examined Airbnb's market share and host structure in the top 12 states that comprise the majority of Airbnb's inventory. We ranked the states based on their Airbnb revenues.

3. Results

Table 1 presents an overview of Airbnb supply, demand, and revenues for the 12-month period between November-2017 and October-2018. The results show that majority of Airbnb supply, demand, and revenues (SDR) was generated through entire homes, which account for approximately 70%, 75%, and 91% of SDR respectively.

<<Table 1>>

The results in Panel B further show that 37.5% of Airbnb hosts were single-unit hosts, while the remaining 63.5% had two or more listings. The majority of Airbnb SDR were generated by Airbnb hosts who had nine or more listings (Q4). While our initial investigation of

Airbnb's SDR shows that the majority of Airbnb listings were entire-home properties and that multi-unit hosts generated the majority of Airbnb's SDR, we combined these two dimensions (type of property and host structure) in Table 2. The results show that the majority of Airbnb supply (Panel A) consist of entire homes across all host categories (Q1-Q4). Similar findings are observed for Airbnb demand and revenues (Panels B and C). Travelers clearly prefer entire home listings; thus, the majority of Airbnb's revenues was generated by these properties. While there are significant differences between single and multi-unit hosts in terms of SDR, these results collectively suggest that the majority of Airbnb's SDR were driven by entire home listings irrespective of host structure.

<<Table 2>>

To gain further insights, we analyzed whether Airbnb's property types and host structures vary within and between the top 12 and remaining 38 states. Tables 3 to 5 present these results.

<<*Table 3>>*

<<Table 4>>

<<Table 5>>

The results show that the top 12 states collectively had more and a higher proportion of multi-unit hosts than the other 38 states combined. 71% of Airbnb's revenues were generated by multi-unit hosts (Q2-Q4) in the top 12 states, while multi-unit hosts in the remaining 38 states accounted for approximately 29% of Airbnb's revenues. Among the multi-unit hosts, the

majority of revenue was generated by hosts with nine or more listings (Q4) in both the top 12 states and remaining 38 states, at 35.4% and 33.2% respectively. Among the top 12 states, Florida and South Carolina had the lowest revenues generated by single-unit hosts (Q1), at 14.9% and 17.9%, respectively. The remaining revenues (85.1% in Florida and 82.1% in South Carolina) were generated by multi-unit hosts (Q2-Q4). On the other hand, single-unit hosts (Q1) accounted for the majority of revenues in New York, at 54%, 25 percentage points higher than the number for the top 12 states collectively (29%).

Although investigating Airbnb's SDR along the lines of host structures and property types provides valuable insights about the nature of the company, such analyses alone do not portray Airbnb's growing share of the lodging market. We thus treated Airbnb as a lodging corporation to analyze its market share (see Table 6).

<<Table 6>>

Airbnb's market share of SDR were 13.1%, 6.9%, and 10.5%. The company's growth in these key metrics is remarkable, and is significantly higher than the numbers reported for 2014-2015 (Lane & Woodworth, 2016). Further, the majority of Airbnb's market share of SDR were driven by multi-unit hosts. More strikingly, in the top 12 states, Airbnb's market shares of SDR were 17.7%, 9.4%, and 13.1% of the total lodging industry, which are much higher than Airbnb's total market shares in the entire U.S. Similar to the overall market share measures for the U.S., the majority of market shares in the top 12 states were driven by multi-unit hosts, suggesting that Airbnb should be more accurately characterized as a lodging corporation as opposed to simply a platform in the sharing economy.

4. Discussion

Given the proliferation of multi-unit hosts, and the subsequent professionalization of the platform, the present study conducted a data-rich assessment of how Airbnb's property types and host structures contribute to its success. While this issue of the professionalization and corporatization of Airbnb is certainly not new (e.g., Slee, 2014), there is little comprehensive data about the changing nature of the company. Using data from all fifty states in the U.S., we found that a majority of Airbnb's SDR are derived from entire-home listings. Moreover, multi-unit hosts and those with entire-home listings dominate the platform, contributing up to 69% of Airbnb's revenues. This argument is further illustrated by the fact that the majority of Airbnb's revenues (74%) are derived from 12 states with higher populations and more tourism activity, a finding that exemplifies the opportunism and business-orientation of professional hosts on the platform (Dolnicar, 2019; Ferré-Sadurní, 2019). We also examined Airbnb's market shares relative to the overall lodging industry to demonstrate that its increasing professionalization has enabled the company to grow exponentially in terms of capturing share of SDR in the U.S. lodging industry.

4.1 Research implications

This research answers a key question posed by Dolnicar (2019) about whether there has been a change in the nature of hosts on Airbnb and whether "genuine" peer-to-peer accommodation (i.e., that offered by single-unit hosts) is on the decline. In answer, we found a significant increase in the contribution of multi-unit hosts to Airbnb's success; while in 2014-15 an estimated 16% of hosts were multi-unit, generating 40% of Airbnb's revenues across 14 U.S.

cities (O'Neill & Ouyang, 2016), our estimates for all fifty states indicate that 63.5% of Airbnb hosts had two or more listings, generating as much as 69% of Airbnb's revenues. In so doing, we re-open the debate on whether Airbnb in its newer avatar has moved too far away from its sharing economy ethos (Crommelin, Troy, Martin, & Pettit, 2018) and simply represents a "nightmarish form of neoliberal capitalism" (Martin, 2016).

If we are to understand Airbnb as a *multi-sided platform* (Hagiu & Wright, 2015), we need to more comprehensively examine the roles played by different actors in the platform's ecosystem, and holistically assess the impacts on different facets of the Airbnb phenomenon, from the customer experience to competitive dynamics within and outside the industry, and the impact on society more broadly (Wirtz, So, Mody, Liu, & Chun, n.d.).

4.2 Practical Implications

Airbnb must carefully consider the implications of its increasing professionalization on its brand identity (Schaal, 2019). Given that authentic interpersonal contact represents one of Airbnb's key drivers of memorable experiences and brand loyalty (Mody, Hanks, & Dogru, 2019), such a divergence may be tricky in the long run for Airbnb 2.0.

For the *hotel industry*, it is important to understand the strategic implications of Airbnb's transition to a lodging corporation. That the majority of Airbnb's supply (70.1%) comprises entire homes, particularly those offered by multi-unit hosts, intensifies the *product form competition* for hotel companies. Still, it is important for hoteliers to realize that lowering price is not a solution, short or long-term, to Airbnb's encroachment on the accommodation market share. Instead, hotel brands across segments must focus on creating a strong *experiential value proposition* that offers emotionally-rich, memorable travel experiences.

For *policy makers* responsible for regulating Airbnb-like accommodation, differentiating between "mom-and-pop" (single-unit) hosts and those operating at a commercial scale (multi-unit professionals) is important to design more effective regulation on a variety of issues ranging from taxation, land use policy, and health and safety, and the ability to enforce codes pertaining to these various regulations (Wegmann & Jiao, 2017).

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Table 1. Overview of Airbnb Supply, Demand and Revenue (Entire U.S.)

Table 1. Overview of Airono Suppry, Bernand and Revenue (Entire C.S.)											
Panel A: Entire Homes, Private Rooms, and Shared Rooms											
	Supply	%	Demand	%	Revenue	%					
Entire Homes	199,474,324	70.1	69,999,451	75.1	17,273,013,171	90.7					
Private Rooms	79,554,297	28.0	22,212,850	23.8	1,735,508,750	9.1					
Shared Rooms	5,637,788	2.0	963,434	1.0	39,107,009	0.2					
Total Airbnb	284,610,355	100.0	93,175,735	100.0	19,047,628,931	100.0					
Panel B: Single vs. Multi-unit Hosts											
Supply % Demand % Revenue											
Q1 (1 Listing)	106,809,352	37.5	34,010,600	36.5	5,880,546,946	30.9					
Q2 (2 Listings)	40,380,339	14.2	14,141,498	15.2	2,304,108,510	12.1					
Q3 (3 to 8 Listings)	60,792,594	21.4	21,371,932	22.9	4,234,470,840	22.2					
Q4 (9+ listings)	76,628,070	26.9	23,651,705	25.4	6,628,502,634	34.8					
Total Airbnb	284,610,355	100.0	93,175,735	100.0	19,047,628,931	100.0					

Table 2. Airbnb Supply, Demand and Revenue: Entire Homes, Private Room, and Shared Rooms (Entire U.S.)

Panel A: Airbnb Supply										
	Q1	%	Q2	%	Q3	%	Q4	%		
Entire Homes	74,038,703	69.3	24,839,278	61.5	38,571,489	63.4	62,024,854	80.9		
Private Rooms	31,205,576	29.2	14,941,442	37.0	20,839,639	34.3	12,567,640	16.4		
Shared Rooms	1,561,407	1.5	599,619	1.5	1,356,907	2.2	2,119,855	2.8		
Total	106,809,352	100	40,380,339	100	60,792,594	100	76,628,070	100		
Panel B: Airbnb Demand										
	Q1	%	Q2	%	Q3	%	Q4	%		
Entire Homes	26,293,859	77.3	9,664,583	68.3	14,604,624	68.3	19,436,385	82.2		
Private Rooms	7,583,993	22.3	4,393,582	31.1	6,494,609	30.4	3,740,666	15.8		
Shared Rooms	132,748	0.4	83,333	0.6	272,699	1.3	474,654	2.0		
Total	34,010,600	100	14,141,498	100	21,371,932	100	23,651,705	100		
			Panel C: Airbi	nb Reve	enue					
	Q1	%	Q2	%	Q3	%	Q4	%		
Entire Homes	5,330,126,382	90.6	1,988,063,319	86.3	3,691,276,007	87.2	6,263,547,464	94.5		
Private Rooms	542,553,541	9.2	312,235,398	13.6	532,646,310	12.6	348,073,501	5.3		
Shared Rooms	7,867,023	0.1	3,809,793	0.2	10,548,523	0.2	16,881,670	0.3		
Total	5.880.546.946	100	2,304,108,510	100	4,234,470,840	100	6,628,502,634	100		

Table 3. Airbnb Supply: Single vs. Multi-unit Hosts

Rank	States	Q1	%	Q2	%	Q3	%	Q4	%
1	California	17,900,000	35.7	7,553,505	15.1	10,700,000	21.3	14,000,000	27.9
2	Florida	10,400,000	24.7	9,770,614	23.2	10,700,000	25.4	11,300,000	26.8
3	New York	11,400,000	49.4	-	0.0	6,463,587	28.0	5,205,407	22.6
4	Hawaii	2,714,659	32.5	1,200,687	14.4	2,140,224	25.6	2,301,011	27.5
5	Colorado	3,698,153	31.0	2,033,664	17.1	2,738,244	23.0	3,450,206	28.9
6	Texas	7,442,348	44.5	2,444,365	14.6	2,405,543	14.4	4,435,759	26.5
7	South Carolina	1,741,026	29.2	1,129,165	18.9	1,383,429	23.2	1,707,180	28.6
8	Tennessee	1,896,783	32.4	758,586	12.9	1,567,074	26.7	1,639,941	28.0
9	Massachusetts	2,842,670	37.9	1,131,117	15.1	1,513,349	20.2	2,015,324	26.9
10	Washington	2,792,361	39.4	1,060,061	14.9	1,244,536	17.6	1,994,142	28.1
11	Oregon	2,575,854	36.9	967,566	13.9	1,311,073	18.8	2,117,456	30.4
12	North Carolina	3,120,360	43.4	1,071,151	14.9	1,058,439	14.7	1,935,720	26.9
	Total Top 12 States	68,524,214	35.5	29,120,481	15.1	43,225,498	22.4	52,102,146	27.0
	Other States	38,285,138	41.8	11,259,858	12.3	17,567,096	19.2	24,525,924	26.8
	Total U.S.	106,809,352	37.5	40,380,339	14.2	60,792,594	21.4	76,628,070	26.9

Table 4. Airbnb Demand: Single vs. Multi-unit Hosts

Rank	States	Q1	%	Q2	%	Q3	%	Q4	%
1	California	5,858,646	35.2	2,666,754	16.0	3,944,584	23.7	4,196,604	25.2
2	Florida	3,147,082	21.7	3,296,614	22.7	3,835,888	26.4	4,228,047	29.1
3	New York	3,821,502	50.3	-	0.0	2,286,397	30.1	1,491,791	19.6
4	Hawaii	1,481,724	36.4	646,129	15.9	1,014,304	24.9	923,196	22.7
5	Colorado	1,477,493	37.1	843,133	21.2	836,638	21.0	823,734	20.7
6	Texas	1,653,662	37.5	702,973	15.9	760,006	17.2	1,290,865	29.3
7	South Carolina	567,890	28.9	400,816	20.4	468,778	23.9	525,973	26.8
8	Tennessee	714,713	31.7	308,248	13.7	666,165	29.6	563,192	25.0
9	Massachusetts	879,999	35.5	390,832	15.8	560,418	22.6	648,726	26.2
10	Washington	1,174,681	41.9	437,760	15.6	506,633	18.1	681,857	24.3
11	Oregon	1,030,740	41.0	381,885	15.2	423,126	16.8	677,282	27.0
12	North Carolina	1,094,219	45.2	390,667	16.1	372,038	15.4	565,093	23.3
	Total Top 12 States	22,902,351	34.9	10,465,811	15.9	15,674,975	23.9	16,616,360	25.3
	Other States	11,108,249	40.4	3,675,687	13.4	5,696,957	20.7	7,035,345	25.6
	Total U.S.	34,010,600	36.5	14,141,498	15.2	21,371,932	22.9	23,651,705	25.4

Table 5. Airbnb Revenue: Single vs. Multi-unit Hosts

Rank	States	Q1	%	Q2	%	Q3	%	Q4	%
1	California	1,130,701,606	32.1	474,905,218	13.5	716,219,536	20.3	1,205,178,162	34.2
2	Florida	493,285,090	14.9	517,218,619	15.6	972,047,157	29.3	1,337,052,350	40.3
3	New York	744,007,679	54.0	-	0.0	381,692,707	27.7	251,190,886	18.2
4	Hawaii	304,378,608	27.7	137,729,579	12.5	289,382,256	26.3	369,100,000	33.5
5	Colorado	269,940,664	25.7	142,654,205	13.6	249,879,679	23.8	386,740,888	36.9
6	Texas	268,555,056	33.6	99,557,825	12.4	112,216,206	14.0	319,878,671	40.0
7	South Carolina	99,989,675	17.9	74,006,709	13.2	155,074,654	27.7	230,946,456	41.2
8	Tennessee	121,944,684	24.2	54,738,188	10.9	135,451,865	26.9	192,335,629	38.1
9	Massachusetts	183,504,615	36.4	72,730,626	14.4	97,278,183	19.3	150,537,225	29.9
10	Washington	166,955,634	36.9	59,494,502	13.1	70,838,324	15.6	155,437,502	34.3
11	Oregon	141,173,864	31.7	48,597,963	10.9	58,548,464	13.1	197,691,681	44.3
12	North Carolina	155,956,917	35.0	53,105,389	11.9	52,334,137	11.8	183,582,049	41.3
	Total Top 12 States	4,080,394,090	29.0	1,734,738,825	12.3	3,290,963,166	23.4	4,979,671,499	35.4
	Other States	1,800,152,856	36.3	569,369,685	11.5	943,507,674	19.0	1,648,831,136	33.2
	Total II S	5 880 546 946	30.9	2 304 108 510	12.1	4 234 470 840	22.2	6 628 502 634	34 8

Table 6. Airbnb's Market Share of the Lodging Industry (%)

		Supply			D	emand		Total Revenue		
Rank	States	Total	\mathbf{S}	M	Total	S	M	Total	S	M
1	California	20.8	7.4	13.4	10.4	3.7	6.7	12.8	4.1	8.7
2	Florida	21.1	5.2	15.9	11.1	2.4	8.7	16.7	2.5	14.2
3	New York	21.2	10.5	10.7	10.6	5.3	5.3	9.5	5.1	4.4
4	Hawaii	29.8	9.7	20.1	20.5	7.5	13.0	20.1	5.6	14.6
5	Colorado	22.3	6.9	15.4	12.5	4.6	7.8	21.0	5.4	15.6
6	Texas	8.9	4.0	5.0	3.8	1.4	2.4	6.4	2.1	4.2
7	South Carolina	13.2	3.8	9.3	7.3	2.1	5.2	16.1	2.9	13.2
8	Tennessee	11.1	3.6	7.5	6.9	2.2	4.7	12.7	3.1	9.6
9	Massachusetts	19.7	7.5	12.2	10.3	3.7	6.7	11.2	4.1	7.1
10	Washington	16.8	6.6	10.2	10.3	4.3	6.0	12.0	4.4	7.6
11	Oregon	22.4	8.3	14.2	13.7	5.6	8.1	18.6	5.9	12.7
12	North Carolina	11.3	4.9	6.4	6.2	2.8	3.4	10.5	3.7	6.8
	Total Top 12 States	17.7	6.3	11.4	9.4	3.3	6.1	13.1	3.8	9.3
	Other States	8.4	3.5	4.9	4.2	1.7	2.5	6.7	2.4	4.3
	Total U.S.	13.1	4.9	8.2	6.9	2.5	4.4	10.5	3.2	7.3

S and M denote single-unit and multi-unit host, respectively.