

**Proceedings of the
6th International Conference on
Innovation and Entrepreneurship
University of the District of Columbia
Washington DC, USA
5-6 March 2018**



Edited by
Dr. Denise A. D. Bedford
Georgetown University
Dr. Elias G. Carayannis
George Washington University

Proceedings of the

6th International Conference on

Innovation and Entrepreneurship

ICIE 2018

Co-Hosted by

The University of the District of Columbia, Georgetown
University and George Washington University, USA

5 - 6 March 2018

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These proceedings represent the work of researchers participating in the 6th International Conference on Innovation and Entrepreneurship (ICIE 2018) which is being co-hosted by Georgetown University and George Washington University and is being held at The University of the District of Columbia (UDC) on 5-6 March 2018.

ICIE is a recognised event on the international research conferences calendar and provides a valuable platform for individuals to present their research findings, display their work in progress and discuss conceptual and empirical advances in the areas of Innovation and Entrepreneurship. It provides an important opportunity for researchers and practitioners to come together to share their experiences of researching in this varied and expanding field.

The conference this year will be opened with a keynote presentation by Dr. Pawan Handa who has recently retired from The Goodyear Tire & Rubber Company; Pawan will be talking about *“Sustainable Success - Essential Ingredients”*. The second day of the conference will be opened by Dr Seema D. Iyer from University of Baltimore’s Merrick School of Business, speaking on *“Impact of Neighborhood Context on Human Development and Innovation—Evidence from Baltimore’s Annual Vital Signs Report”*.

With an initial submission of 182 abstracts, after the double blind, peer-review process there are 52 academic Research papers, 5 PhD Research, 1 Non-Academic and 4 Work in Progress papers published in these Conference Proceedings. These papers represent truly global research in the field, with contributions from Australia, Canada, China, Colombia, Croatia, Denmark, Ecuador, Finland, France, Germany, India, Italy, Japan, Kyrgyzstan, Malaysia, Morocco, Nepal, Nigeria, Pakistan, Peru, Poland, Portugal, Romania, Russia, Saudi Arabia, South Africa, Sri Lanka, Trinidad & Tobago, Tunisia, Turkey, UK and USA.

We wish you a most interesting conference.

Dr. Denise A. D. Bedford

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Revolutionizing the Sharing Economy: How Airbnb Changed the Travel Industry

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Abstract: Three San Francisco design students searching for a solution to their increasingly expensive loft apartment rent created Airbnb in 2008. Less than a decade later, Airbnb has successfully leveraged technology to bring people closer, instead of drawing people apart (as popular consensus would dictate). The innovative internet company is valued at more than \$30 billion, has served more than 150 million travelers, and has formatively shaped the sharing economy phenomenon (Sundararajan, 2017). Airbnb has figuratively and literally changed how people sleep when away from home by providing desirable alternative places to stay while traveling. At its core, Airbnb is a website, an online marketplace that facilitates hospitality services, allowing owners to share or rent their home, apartment, or unique living space to travelers. In just a few short years, Airbnb has grown extensively and expanded significantly. In fact, Airbnb has become a verb, commonly used and understood much like the term, “Google” has. Airbnb generates its revenue as it acts as a broker between hosts that rent out available space on the Airbnb website to travelers who want to live like locals (Gallagher, 2017), a concept that has been embraced as an entirely new, and often better way to travel and experience the world. Airbnb’s facilitation of its network of internet users, creating a peer-to-peer market, significantly contributes to the sharing economy that has emerged as an alternative for suppliers of goods and services that have typically been provided by traditional industries (Byers, Proserpio, and Zervas, 2016). In this way, Airbnb has revolutionized the accommodation industry by providing an alternative option for travelers. This descriptive case study examines the phenomenal financial growth achieved by Airbnb through the creation of microentrepreneurs, the pioneering contributions Airbnb has made to the sharing economy, and the potential disruption of the traditional hotel and hospitality industries.

Keywords: Airbnb, Sharing Economy, Innovation, Entrepreneur, Hotel, Hospitality Industry

1. Introduction

Airbnb was created in 2008 by three college friends, Brian Chesky, Nathan Blecharczyk, and Joe Gebbia (Gallagher, 2017). While struggling to pay rent in San Francisco and contemplating viable startups as aspiring entrepreneurs, the roommates came up with the idea to rent space on their apartment floor with an air mattress during a popular tech conference. The idea was a simple one; in fact, the friends never intended on turning it into a billion dollar enterprise, but that is exactly what happened. They realized they had something, and decided to act on it. What resulted was a billion dollar phenomenon that has changed the way people travel. While the idea of sharing apartment space or couch space is not new, these entrepreneurs were able to revolutionize the concept and change the hotel and hospitality industries as we know them.

At its core, Airbnb is a website that provides a hospitality service, allowing people to share or rent their home, apartment, or living space to travelers. But in just a few years, it has exploded into much more than that. In fact, it has become a verb (“let’s Airbnb it”), and a concept that many have embraced as the new way to see the world. It has created an online community, where people share their living spaces with travelers who either want to travel inexpensively, see different aspects of the city they are visiting, or just share local experiences with a resident (Gallagher, 2017). In short, Airbnb customers want to see a part of the city that they otherwise would not have been able to see if they are guests at traditional hotels. Because many Airbnb hosts live in urban neighborhoods and densely-populated cities, travelers get to share a room, or rent an entire house, in the heart of the attractions they came to visit (Roberts, 2017). This has created a unique movement, changing the way people travel, and the way people are spending and making money.

Although Airbnb does not own any lodging facilities itself, it is boosting local economies, creating controversies, and bringing people closer together as it continues to expand its footprint on the sharing economy (Gallagher, 2017). Airbnb’s most recent valuation of more than \$30 billion, makes it worth more than most leading hotel chains in the world (Dillon, 2016). Airbnb receives a percentage of the rental fees from both guests and hosts (Hill, 2015) each time any of its three million property listings in 65,000 cities across 191 countries (<https://www.airbnb.com/about/about-us>) are using Airbnb as a broker.

These numbers paint an astonishing picture of the company’s impact on local economies and on global connections. The relatively young internet company has made a significant impact on the tourism, travel, and

hospitality industries, and on local economies in diverse cities around the world. These significant advances have not, however, come without controversy. Airbnb is currently battling local legislation in San Francisco (where they were founded and are currently based), New York, and several cities abroad (Sundararajan, 2017). As there are specific regulations against renting homes in some areas, many questions remain as to how Airbnb is to operate in accordance with local legislation, and how they will be able to navigate moving forward (Gallagher, 2017). As a result, they are involved with several lawsuits.

In addition to the lawsuits that Airbnb finds itself involved in, there are many critics who suggest that Airbnb has not done enough to reduce the liability of its renters and owners. This case study provides an in-depth examination of Airbnb's creation, unique room-sharing concept, and development within the revolutionary sharing economy. Additionally, the case study will consider Airbnb's impact on the traditional hotel economy and will look forward to consider how Airbnb might plan to expand and continue to solidify its core competencies into a sustainable competitive advantage.

2. Company Background

Airbnb was created in San Francisco, not by tech experts, but by graduates of the Rhode Island School of Design: Brian Chesky, Nathan Blecharczyk, and Joe Gebbia. Their vision was to create an aesthetically appealing website where the final product offering was at most, no more than three clicks away – a technique they borrowed from another design expert, Tim Cook of Apple (Gallagher, 2017). While working on other startup projects, the three friends struggled to make ends meet in their tiny San Francisco apartment. During a popular tech conference where hotel rooms were at a severe shortage, Blecharczyk got the idea to rent out floor space in their apartment, promising an air bed and a hot breakfast in the morning. As a result, the concept of an “airbed-and-breakfast” was born, and the three friends found a way to afford their expensive rent.

The trio built on the idea quickly, while still continuing with other entrepreneurial projects. After realizing they had something, they abandoned their other projects and dedicated themselves fulltime to *Airbedandbreakfast.com* (the original name of the website). They built a rudimentary website that briefly explained their service offering: “Two designers create a new way to connect at this year’s ISDA conference,” and a listing of three airbeds in their apartment for \$80.00 each (Gallagher, 2017). Their first guest, Amol Surve, was from Mumbai and a recent graduate of Arizona State University’s master’s program in industrial design. He ended up staying for five nights, and described this experience as a hack: “I was trying to hack and go to the conference, and they were trying to hack and make rent. It was like a perfect match” (Gallagher, 2017). The three friends later decided to take their idea elsewhere and landed at South by Southwest, a large annual technology and music festival in Austin, Texas. They introduced *Airbedandbreakfast.com* as an entirely new website, and formally sought publicity for their startup. Chesky later said about the trip: “If you launch and no one notices, you can keep launching. We kept launching, and people kept writing about it. We thought we’d just keep launching until we got customers” (Hill, 2015).

The Airbnb founders continued to refine their service model as they embarked on the long, tedious process of sales pitches to venture capitalists, meetings with business consultants and development specialists, and seemingly never-ending flights to actual Airbnb owners’ homes to gather market research first-hand and refine their product offering. The website’s success certainly did not occur without many challenges along the way. After several rounds of fundraising, the concept was rejected by all of the targeted investors – many of whom later acknowledged regret for not making the investment. The idea of sharing out room space was quite odd. At the time, most investors seemed uneasy about the fact that the entrepreneurs were products of an art school, not technology experts, due mainly to the fact that many were looking for the next Google or Facebook and did not equate the young art school graduates with cutting edge technology expertise that demanding an investment (Gallagher, 2017). Despite their request from venture capitalists for only \$150,000 (valuing the company at \$1.5 million would have yielded early investors over \$1 billion today), the idea was simply too underdeveloped and the young trio could not convince would be investors that the risk was justified (Libert, Wind, & Beck, 2014).

However, Chesky, Gebbia, and Blecharczyk persevered and achieved tangible and measurable success when they launched their site for the third time in Denver, Colorado where the Democratic National Convention was being held. Media outlets were reporting on the shortage of hotel sleeping rooms. During this same

timeframe, and after several attempts, Airbnb was successful at securing a feature on the tech blog TechCrunch (Gallagher, 2017). A marketing promotion that provided breakfast for Airbnb guests was a significant portion of their publicity campaign that featured Obama O's. They designed a cereal box and added slogans: "The breakfast of change" and "Hope in every bowl" (Roberts, 2017). This idea led to a larger money maker, where promoted the cereal, calling them limited edition boxes, and selling them for \$350 per box (Gallagher, 2017). This idea, coupled with the increased exposure, led to the beginning of Airbnb's huge success in the sharing economy.

3. A "Sharing Economy" Pioneer

Peer-to-peer markets, which have come to be known as the sharing economy, have exploded in recent years (Sundararajan, 2017). Companies like Uber, Lyft, Taskrabbit, Etsy, and Airbnb have made it easier to catch a ride, have furniture put together, purchase a customized gift, find a place to stay, and collectively make life easier. The sharing economy has emerged as an alternative for suppliers of goods and services that have typically been provided by traditional industries (Sundararajan, 2017). The rapid growth of peer-to-peer platforms can be credited to two key factors: technological innovations and supply-side flexibility. Technological innovations have streamlined the process of market entry for suppliers, have facilitated searchable opportunities for consumers, and have kept transaction costs low. Supply-side flexibility is another key element to sharing economy platforms. Uber drivers can add or remove themselves from the available supply of drivers with the swipe of an app, and similarly other suppliers can easily list and remove the selection of goods or services they have on hand (Byers, Proserpio, and Zervas, 2016). As an observation of the growth of Wikipedia, one of the sharing economy front runners, Benkler (2004) wrote: "sharing would soon be at the very core of the most advanced economies – in information, culture, education, computation, and communication sectors." Sundararajan (2017) also presents five key indicators to characterize the sharing economy: (1) largely market based, (2) high-impact capital, (3) crowd-based "networks" rather than centralized institutions or "hierarchies," (4) blurring the lines between the personal and the professional, and (5) blurring lines between fully employed and casual labor, between independent and dependent, and between work and leisure.

While the sharing economy has experienced tremendous recent growth, it is not an entirely new concept as people have been sharing rides and couches for generations. In fact, Chesky pointed out in an interview that the only person who didn't tell him Airbnb was a horrible idea in the beginning was his own grandfather, who, when he heard what his grandson was up to, just nodded and said, "Oh, of course. That's how we used to travel" (Gallagher, 2017). The fact is, there are several other websites that offer sharing space, such as couchsurfing.com (which is completely free) and VRBO.com (Vacation Rental by Owner). What makes Airbnb different from others is highlighted by Sundararajan in "The Sharing Economy: The End of Employment and the Rise of Crowd-Based Capitalism," where he writes, "Airbnb has tossed aside the barriers and built an easy, friendly, accessible platform inviting anyone to do it. Unlike on previous websites, Airbnb listings were designed to showcase home renters' personalities; the company invested in individual professional photography services to make sure the space would look lush and inviting; and searching, messaging, and payment were all self-contained, seamless, and friction-free" (2017). This method has further developed Airbnb's ideology of "Belong Anywhere," a concept they created to better illustrate their vision (Gallagher, 2017).

The sharing economy phenomenon has created a world of what is being called "microentrepreneurs." Anyone with access to a vehicle can provide a ride with the tap of a button on a smartphone. Websites like Taskrabbit.com allow individuals with certain skills to put them up for sale. A small business owner can purchase marketing services from a freelance professional, and a homeowner can hire a handyman to install carpeting in their home, all due in large part to technology reducing transaction costs and advertising, which makes sharing assets cheaper and easier than ever (Swallow, 2012). This type of economy has made life easier for many, but has also disrupted certain industries like Uber has with taxi cab drivers (Marchi, 2016).

Creating microentrepreneurs is exactly what Chesky and his team wanted to create with Airbnb. As Sundararajan (2017) points out, "a host with a spare room has more than an empty room – he or she has an asset that is not being used at full capacity. With Airbnb, the host is able to turn a small amount of extra space into a source of income, and in this sense, tap into excess capacity by making the most of the space." In fact, many Airbnb hosts have turned this process into a business. Gallagher (2017) writes in her book "The Airbnb

Story” that while the average host makes around \$6,000 a year, there are many others who make much more than that. Evelyn Badia, at the age of fifty, started hosting out of Park Slope, Brooklyn, when she lost her job in 2010. She now is making a low six-figure income by booking her listings about 80% of the time. Badia reports that she has hosted 400 people. She has since started a consulting business for hosts, where she charges \$95.00 an hour (Gallagher, 2017).

4. An Industry Disruptor, or Industry Partner?

What makes Airbnb different from some of the other sharing economy giants like Uber and Lyft, is that it is not necessarily disrupting the hotel industry. In fact, there is significant evidence to support the idea that Airbnb has found a way to coexist with traditional hotels. For example, a study conducted by Byers, Proserpio, and Zervas, (2016) focused on the impacts that sharing economy platforms have on existing industries. With Airbnb having served over 50 million guests since it was founded in 2008, and a market capitalization reaching \$30 billion, they hypothesized that Airbnb has a measurable and quantifiable impact on hotel revenue in certain areas. They also hypothesized that some stays with Airbnb serve as a substitute for certain hotel stays, thereby impacting hotel revenue. The authors further discovered that there may be a way for Airbnb and traditional hotels to coexist. According to Airbnb, in many cities, over 70% of Airbnb properties are outside the main hotel districts, suggesting complementarity (Airbnb.com). What this means is that the company appears to have found a way to thrive, while not disrupting the traditional hotel and hospitality industries. This is directly in line with Chesky’s vision, where he wants to offer a completely different experience from what traditional hotel attendants desire (Roberts, 2017). As a result, professionals traveling on business are still going to stay in traditional hotels. Additionally, tourists looking for an inexpensive place to stay for the night will more than likely search for an Airbnb host.

Another key point that separates Airbnb from other sharing economy platforms such as Uber and Lyft, is the amount of time invested or required to perform a specific task. For example, an Uber driver must dedicate a set period of time to pick someone up and drop them off at their destination, and all the time in between. Conversely, an Airbnb host could invest virtually no time into a guest. In other words, it costs almost nothing extra to rent out a spare room in a home or apartment. The host simply posts the spare room on the Airbnb website, and the logistics are taken care of for them with minimal effort. That is not to say that some hosts do not follow a different format, however. Some of the more profitable Airbnb hosts put a great deal of time and effort, making sure homes are professionally cleaned, linens are thoroughly washed, and other valued amenities such as Wi-Fi are provided. These particulars do come at a cost – in the form of time, effort, and money (Sundararajan, 2017). It all depends on the host, what level of service they want to provide, and what level of income they want.

In yet another example of how Airbnb has separated itself, Dillon (2016) describes how Airbnb has followed Christensen’s “theory of jobs to be done.” The theory describes how firms tend to focus too much on creating a product that is bigger and better, without understanding the customer’s choices. In short, customers “hire” a company to do a job. Airbnb understands this concept, and has built their company around creating a job that people want done. They have created experiences of staying like a local, rather than unpacking a suitcase in a room with a bed and a shower. Dillon (2016) goes on to illustrate Airbnb’s customer strategy, and how it falls in line with what customers have hired Airbnb to provide – an experience to live how the locals live.

5. The End of the Suburbs

Airbnb has created a wonderful platform for travelers, but its innovative approach has also created a bit of turmoil in the land of quiet, peaceful neighborhoods. Many homeowners are not very happy with the idea of transients frequently passing in and out of their residential areas. In addition, in New York City, where laws are very stringent on hosts renting out their space, there is a great deal of controversy.

There have also been numerous cases of serious crimes and even deaths while guests have stayed at Airbnb rentals. Perhaps the most serious case involving Airbnb involves a man who died of a traumatic brain injury when a tree branch fell on him in the back yard of an Austin, Texas Airbnb rental (Gallagher, 2017). Luckily, the owner had specific insurance that covered commercial activity, and the family was able to reach a settlement. However, most insurance companies do not protect against these types of cases, which they consider commercial activity. And Airbnb claims it is not liable: “Please note that Airbnb has no control over the conduct of hosts and disclaims all liability” (Airbnb.com). The company has since put in place property damage

insurance of \$1 million per case. In another case in Madrid, a young man claimed to have been locked in an Airbnb apartment and was forced to submit to a sexual act (Gallagher, 2017). The young man texted his mother as the events unfolded, who in turn notified Airbnb. The company said they were not at liberty to disclose the address, and the mother was instructed to notify the local authorities. He was eventually able to talk his way out of the situation without being harmed, and Airbnb later updated its policy to grant employees the authority to contact local authorities in such cases.

Airbnb has also experienced several controversies relative to municipal regulation. Several major cities such as Barcelona, Berlin, and San Francisco, have raised concerns on whether Airbnb is in compliance with local laws. In addition, New York seems to present its own significant problems, although it is not one of Airbnb's biggest (the company is in 34,000 cities and 80% of those listings are outside the United States). Their issues are different in each city, but for the most part the problem is that Airbnb is a violation of short-term rental laws. For example, in Texas, "a hotel is considered to be any building in which members of the public rent sleeping accommodations for \$15 or more per day (Byers, Proserpio, and Zervas, 2016)."

Meanwhile, Airbnb continues to present its business as low-impact, made up of everyday hosts occasionally renting out their own home (Airbnb.com). An independent report on its business in Lisbon shows that "many listings on Airbnb in Lisbon are local residents' homes," helping readers understand that "72% of hosts in Lisbon have only one listing (Dillon, 2016)." However, separate research shows that the 28% of hosts with more than one listing account for two-thirds of the company's business in Lisbon. Additionally, Lisbon is not an isolated case. In Reykjavik, approximately 2,551 apartments of the 50,000 there available are Airbnb units – around 5% (Dillon, 2016). This is not only occurring in major cities, but small areas as well. The tiny town of Joshua Tree, California, lists about 200 Airbnb rentals, out of a mere 7,000 residents (Dillon, 2016). A Joshua Tree resident said, "Airbnb and vacation rentals are changing our community.... House prices are going up because people now buy houses to rent out as vacation rentals, making it close to impossible for people working in the area to buy a house (Dillon, 2016)." To make matters worse, in San Francisco where they face the most opposition, a new rule required Airbnb hosts to register with the city, but over a year later no more than fifth have done so (Slee, 2016). Airbnb has decided to fire back, claiming that the city is violating three laws that state that website owners are not responsible for content provided by users on their sites. These are the same laws that protect bloggers, newspapers, and social media sites like Craigslist, Yelp, and YouTube (Slee, 2016).

6. What's Next for "Belonging Anywhere"

At their annual "Airbnb Open", the company has presented a new concept that proposes to expand the idea from not just the stay, but the entire trip. While the current idea of belonging anywhere is tied simply to where to sleep while traveling, Airbnb calls the "City Host" venture (Gallagher, 2017), the rest of the trip. The concept is described as off-the-tourism-grid activities that tourists would not normally see (Gallagher, 2017). Once again, this idea is not new. But according to Chesky, these ideas have not succeeded because they are not unique. Additionally, none of these previous ideas were tied to a global phenomenon worth billions of dollars to back them. Airbnb wants to provide one-of-a-kind experiences that are specific to the area that give off the vibe of the neighborhood. Chesky added, "These are deep, insider immersions into somebody's world, a unique vertical that doesn't exist today (Gallagher, 2017)." In short, he calls it "the thing after" (Gallagher, 2017).

As far as company growth, Airbnb's expansion goals are to become the first online-travel company with a market cap of \$100 billion within the next ten years (Gallagher, 2017). The company is also experimenting with other types of rental stays, from unique ideas such as treehouses and campers, to their own version of hotel chains. In a small town south of Kyoto, Japan, there exists a rental with an entire town as a host. Yoshino Cedar House is a new concept from Samara design and innovation studio, created by Joe Gebbia himself (Flowers, 2017). The town was designed to be able to boost the local economy, while providing a unique stay to locals.

Chesky has also compared the growth of his company to that of Moore's Law, which states that technology grows so fast, computer processors double in speed every two years. He prophesizes the next ten years will be more crucial – and change more – than the last twenty five. The implications of this rapid growth are staggering. Additionally, he states that cities will be much more diverse soon as well (Gallagher, 2017). But he

views this as progress. He suggests that the world is changing rapidly, and change should be embraced. "If you embrace it and you're ahead of the curve, you can find a lot of opportunities" he says (Gallagher, 2017).

7. Conclusion

In just a few short years, Airbnb has grown from a simple idea, into what is known as a unicorn (a billion dollar venture). And despite all the legal battles and controversies, there is strong evidence that the company will continue to grow, due mainly to its ease of use, and consumers of all ages, not just millennials, are increasingly moving toward the room sharing concept (Gallagher, 2017). There is a strong demand for what Airbnb is providing (Dillon, 2016). Not just by millennials who were the early adopters, but by all walks of life, from CEOs to retired baby boomers. Carl Shepherd, cofounder of HomeAway, said in an interview about resisters, "It's like they're saying, 'I'm not going to participate in the world in 2015 (Gallagher, 2017).'" While the company's ideas are not necessarily ground-breaking, Airbnb has created a solid benchmark for future sharing economy players. The concept of sharing one's personal property, service, or talents as assets can be transferred into any number of business ventures in the sharing economy. With technology advancing faster than business can keep up with, entrepreneurs may be able to turn a simple 'home-sharing' idea into other million dollar businesses. Perhaps Airbnb franchises, or even more unique Airbnb stays. While the company's idea is certainly not new, it is important because the concept will continue to grow, and potentially provide a greater economic impact through the addition of imitators, second movers, early followers, and late movers (Sundararajan, 2017).

No doubt the sharing economy is creating a shift and becoming a new way for individuals to provide or supplement their income, but there remains some question on how far it will go. There still may be some uncertainty on whether it will truly represent the rise of the microentrepreneur, or whether it will be the end of traditional forms of employment. Sundararajan (2017) postulates that we may be seeing the end of the high standards of living brought about by the Industrial Revolution and the 1950s and 1960s. The sharing economy may bring about a new type of worker, one who is focused on the next side gig, instead of a long and fruitful career with health insurance and a retirement fund. Millennials are already gaining a reputation of job-hopping, and not committing to one employer (Angeline, 2010). It is too early to predict what these implications may be, but the possibility is there. The term 'work' used to mean a 40 hour work week, punching a clock, and reporting daily to a boss. Now, work may mean several 40-minute windows of a small task, allowing individuals to take advantage of a labor supply in a much more smooth and efficient way (Sundararajan, 2017).

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