

1. “CLEANBNB”

CleanBNB is a network platform app that connects cleaning representatives directly to Airbnb property owners. The connection will occur via an “app” in which Airbnb property owners can locate contract cleaners in their area. Airbnb property owners will pay a subscription fee to access the network platform to connect them to the cleaning representatives. Airbnb property owners can locate and connect with cleaners based on the cleaning needs of their property and schedule an appointment based on when their property is vacated. Cleaning representatives can connect with Airbnb property owners based on what time they require an appointment and what cleaning services they require, similar to a package (e.g., floors mopped, kitchen cleaning, sheets washed) as opposed to the traditional “deep cleaning” services. Afterwards, Airbnb property owners and cleaners can both review the quality of their experience.

2. Potential Value Added

CleanBNB connects Airbnb property owners to cleaning representatives looking for work. Unlike traditional cleaner companies, CleanBNB does not require a weekly/monthly subscription to the actual cleaning services. The demand for cleaning jobs can fluctuate, for example, many owners owning and managing multiple properties making scheduling cleaning appointments with traditional services more difficult. CleanBNB offers “on-the-fly” services for Airbnb property owners by connecting them to cleaning representatives looking for work.

With a CleanBNB membership, you can quickly schedule appointments on an as-needed basis and independent cleaning representatives can access cleaning jobs during periods of no work.

Essentially, the purpose of CleanBNB as a platform is to smooth out the fluctuation of demand for cleaning jobs and supply for cleaning jobs in the Airbnb market.

Assessing Value Added (Data):

Data can be collected via market research to determine how valuable ClearBNB's services are:

- Substitute services
 - Average cost of traditional cleaning companies' services
 - Rates vary from company to company
 - Rates vary from location to location
 - Rates vary for different "cleaning packages"
- Potential buyers of the products (consumer #1)
 - How many Airbnbs are rented out during a period of time
 - How many properties does each Airbnb owner own
 - Airbnb turnover rates
 - In one week, how many times are the properties vacated
 - How often Airbnb property owners need cleaning services
 - Airbnb property owners, if they live in the area, often can clean out the property themselves
 - Several Airbnb property owners own multiple properties and cannot clean the property themselves
- Potential sellers on the platform (consumer #2)
 - How many independent cleaning reps are looking for work?

- How often are independent cleaning reps looking for extra work?
- How often would they use an “app” that connected them to extra cleaning gigs?
- How much do independent cleaning reps charge for cleaning jobs?
- Are independent cleaning reps willing to work smaller cleaning jobs for less pay?

Assessing Potential Value (Surveying):

Consumer surveys can be conducted on both Airbnb property owners (the demanders) and the cleaning representatives (the suppliers), as they are both consumers on this network platform.

These surveys will assess how valuable the product/app would be as well as how much they are willing to pay for a subscription to the platform.

We will conduct a survey to assess the two types of potential CleanBNB consumers with the intent to discern whether or not there are periods where demand for cleaning jobs does not meet supply for cleaning jobs.

- Consumer Type #1: AirBNB property owners
 - How many Airbnb properties do you own?
 - If you own more than one Airbnb property, what tools do you use to manage cleaning, if any (self cleaning, traditional cleaners e.g., Maid.com, cleaning subscription services, independent cleaning reps)?
 - How many times do you rent out your property in a week, on average?
 - How much do you pay for a single cleaning service, regularly?

- How often do you have multiple vacancies that require cleaning in a short period of time?
- Suppose you could choose a cleaning package of floors mopped, kitchen wiped down, and bed sheets/ towels washed and folded. How much are you willing to pay for this single cleaning service package?
- How much are you willing to pay for a subscription service to connect you with cleaning services?
- Consumer Type #2: Cleaning Representatives
 - How many times do you perform a cleaning job in a week, on average?
 - How often are you looking for extra cleaning gigs?
 - How much are you willing to charge for a single cleaning service?
 - How much are you willing to pay for a service to connect you with cleaning jobs?
 - Suppose you could choose to provide a cleaning package of mopping floors, wiping down the kitchen, and washing/folding bedsheets and towels. How much are you willing to charge for a single cleaning service?

3. Porter's 5 Forces Analysis

Substitutes for CleanBNB

The substitute products for the CleanBNB network platform would be traditional cleaning services like Boardwalk Cleaning and Maids.com, cleaning subscription services, and independent contract cleaners. All of these companies offer very similar services to CleanBNB, are often established, and often already built rapport within their communities.

Threat of Entry into the Market

There are several types of entrants in the market: new apps, existing cleaning companies, new cleaning companies, and the Airbnb platform itself. The business model may not be patentable, allowing for similar apps to enter and provide the same services. Existing cleaning services can also take on this model and offer Airbnb cleaning packages of similar nature; they will already have cleaning representatives as employees and have the tools and supplies to support those employees. If there is significant profitability, Airbnb could also integrate this model in their own app. They would already have the technology to do so given the property owners are already using their services. CleanBNB would require large sunk costs to be invested towards, not only the software, but in gathering a large enough network of people, Airbnb property owners and cleaning reps, so that the business model works.

Competitors in the Market

Competitors in this market will be the traditional cleaning services and independent contract cleaners. The two services differ in that traditionally cleaning services and independent contract cleaners typically provide more cleaning than required for an Airbnb. In the case of an established cleaning service, it may not be worth it to send a cleaner for a minimal job at a minimal price (payroll, sending the cleaning van, supplies). However, for those willing to work minimal jobs throughout the week, this product has the potential to be quite valuable to them. They also differ in terms of reliability; traditional cleaning services/ independent contract cleaners usually require scheduling in advance and quote for the time and cost- affecting Airbnb turnover rates which can be very costly. We would have to determine how elastic both the

cleaners are to changes in price, given a different, smaller cleaning job. We would also have to determine how elastic property owners are to change in price-- whether or not there would be more people willing to use this service as opposed to cleaning the property themselves (if possible) if the prices were lower than that of a traditional/ contract cleaner. Finally, we would have to determine if the aforementioned fluctuations and the ability to clean those vacant properties is significant.

Why is this Product Not Yet in the Market?**

The product is most likely not yet in the market because there are several potential entrants, many of whom are already the competitors in the market. Unlike Uber, where there are many drivers at any time on any day, AirBNB rentals are less frequent, and often, many AirBNBs are cleaned by the property owners themselves. There also exists a lack of trust; traditional cleaning companies/ independent contractors have established relationships with their clients and it may be difficult to trust random cleaning reps to perform jobs on their property. Another reason the product is not on the market is because it is complicated to price, which is why many cleaning companies quote jobs and bill after the job is complete. Lastly, the network platform can only be successful if there are many property owners who need cleanings and enough cleaners ready to work. There is no licensure, unlike for Uber drivers a driver's license is required, so it may be hard to find cleaners who are verified to work; it requires a large installed base which can be costly.

***Upon further research, it was discovered that a product similar to CleanBNB already exists in the market. TurnoverBnB is a website/ app that allows its users to connect to cleaning jobs. It is an “autopilot” subscription that interacts with Airbnb’s/Vrbo’s/etc. calendar to automatically schedule jobs.*

<https://turnoverbnb.com/>

4. Strategy

The nature of CleanBNB is a platform market, thus there are important network externalities to be considered when developing a business strategy. Property owners would only be willing to subscribe given there are many cleaning reps in the market, and vice versa.

Generating Positive Externalities/ Switching Costs:

There are several other sunk costs the company should consider incurring early on to 1. create significant endogenous barriers to entry and 2. have a large enough user base to make the company profitable

- Software development/ Product Design
 - Using the cost function, S will most likely affect fixed cost, you can determine (to an extent) the tradeoff of quality to quantity consumed to determine how much to invest in the development
 - However, there should be significant sunk costs incurred when developing the software’s vertical characteristics (quality) to deter entrants with inferior software

from entering the market (ie: investing a lot in user experience, website quality, compatibility on Apple iOS and Android, etc.)

- Advertisements:
 - In addition, a considerable amount of funding should be allocated to advertising since this is a platform market that depends on the amount of users on the platform-- the ROI is theoretically positive
 - You would be advertising to both types of consumer groups
 - Using the profit maximization formula, you can estimate how much to advertise
 - Since this a platform market, funds allocated to advertising in the beginning may be higher in order to create installed base
 - You would advertise to locations where there are many Airbnbs, especially where Airbnb owners might not necessarily live in the same location as the property (e.g., Tahoe, South Padre Island).
 - You would be advertising both the search and experience characteristics to an extent.
 - You will be advertising that the costs of your cleaning services are less than traditional cleaning companies/ independent cleaning reps
 - You will be advertising that the experience of your platform market will be simpler than having to compare the rates/quotes of several companies

- You will also be advertising the experience of your platform market will alleviate periods when you have, for example, multiple vacancies and not enough cleaning reps
- Reviews:
 - In order to increase the installed base and create switching costs, CleanBNB will have a review system so that its Airbnb property owners and cleaning reps can rate their experience.
 - property owners can rate how effective the cleaning reps were at providing the specific cleaning package
 - Cleaning reps can rate how intensive the workload is (the package that the Airbnb property owners purchase should be representative of the actual workload of the job)
 - They will provide a picture upon completion of the job
 - Their reviews will be much like the Airbnb reviews, ensuring that both providers are complying and that the jobs are fair
 - Creating consumer loyalty will increase the switching cost amongst both types of consumers, deterring new entrants.

Pricing Strategy: Two Part Tariff of Network Subscription Fee and Tax on Services

- Network Pricing: Subscription Fee

- Using the hypothetical data we collected from research and surveying, we would determine who is more price sensitive. My hypothesis is that cleaning reps would be more price elastic.
 - Using a price optimization model and the two demands, we would find an optimal price that would maximize profits
- We will charge a lower/ no fee for cleaners to join the platform to increase installed base.
 - Although AirBNB property owners would be generating more benefit (ie: more cleaning jobs), it may be beneficial in the early stages to levy a usage fee onto them because they are (hypothetically) less elastic. Therefore, it could be extremely cheap or even free for cleaning reps to access the platform.
 - Once CleanBNB meets its critical mass, the subscription fee can be reassessed to increase profits
- Taxes on the service
 - The source of profit will be the percentage of the cleaning job, a network tax
 - There will be a price menu in the form of cleaning packages priced according to their workload/ amount of hours needed
 - Packages will be priced based on number of rooms that need cleaning and for basic services
 - You will use a profit maximizing function to determine the optimal network tax

5. Critical Risks

Potential Risks to Profitability

- Large Sunk Costs
 - CleanBNB is a network platform whose business model relies on a large installed base to operate
 - Expensive investment in software development
 - Expensive investment in advertising costs
 - These sunk costs cannot be recovered and if the business were to fail, it can be a huge loss depending on the source of financing

Negative Profits

- In order to quickly obtain a large installed base, you may need to receive negative profits for a period of time

Further Assessing Profitability/ Conclusion

To implement the CleanBNB network platform on a significantly large scale, the information hypothetically collected in this plan is, in my opinion, not sufficient enough to overcome these critical risks, especially in terms of financing the business in its early stages. It would require more extensive surveying to discern exactly how valuable the product is to its two consumers (ie: more sophisticated surveying methods over several types of populations: Airbnb property owners owning 0-5 properties vs. 5-10 properties, cleaning reps of a traditional cleaning company vs. independent contract cleaners). Further research would be needed to determine appropriate prices

for cleaning jobs, as it is traditionally assessed with quotes (cleanliness is subjective). It would also require extensive research of the vacation rental market and crucial data from Airbnb that is not readily available/ not public: how many Airbnb properties exist, how often those properties are vacated, how long they are vacated for, turnover rates, costs of the Airbnbs/ changes in costs of the Airbnbs, etc. Tests of the business model can be run on a smaller scale to assess its successfulness and provide data over its profitability.