#### **The Hypothesis Analytics**

It's amusing and astonishing that how small, at times measured inconsiderate, predictions may lead to an efficacious upshot. Wouldn't it be pleasant to state your prognostications? To express your believes, the outcome they would have and why you think that's the case.

This would be an engaging event, where you make bold statements, crafting a hypothesis to address an open question or problem in a rationalized, thought full proposal.

The format of the hypothesis and certain constraints are stated below. The hypothesis can be of two main categories:

- > Technical.
- Non Technical.

The participants can remain anonymous if they feel comfortable like that, but will provide their identity while submitting. Any entry without there details will not be considered.

The judging criteria will be based on how out of the box and decorously structured their hypothesis is while keeping in mind its industrial efficiency.

The Hypothesis Analysis Constraints:

- Plagiarism will not be tolerated. Same goes with clichés and solely political subjects.
- Emphasis should be laid on grammar, format and originality.
- Participants are refrained from using informal language.
- The hypothesis should comply with the word limit of
- The choice of the participant to remain anonymous or disclose their identity would be given importance to encourage their voice but violence of decorum will not be entertained and the sense of conviction will be acknowledged.
- Participants are allowed to refer to any source for building and supporting there
  hypothesis and penning it down in there own words. Citation of the sources is also
  allowed.
- Likes, comments and shares on the content will also be totaled but make sure that your identity is not revealed publicly if you chose to be anonymous.

# Craft an Experiment Hypothesis

A hypothesis is a prediction you create prior to running an experiment. It states clearly what is being changed, what you believe the outcome will be, and why you think that's the case. The outcome of the experiment will either prove or disprove your hypothesis.

### A hypothesis looks like:

## "[Problem Statement]

[Reason for Testing]

#### IS COMPRISED OF:

#### Analytics Data: Quantitatively describes

the existing state

#### User Feedback:

Identify problems for users with the current experience

#### Competitive Review:

Shows awareness of existing trends

#### Questions and Debates:

Uses testing to make business decisions

# [Proposed Solution]

[Description of What to Test]

#### IS COMPRISED OF:

### Description of Variations: Make it clear what is being

tested

#### Theory About Users, UX, etc.: Helps create an understanding of why the

solution was correct

... will result in [Quantitative Statement]."

[Measurable Outcomes]

#### IS COMPRISED OF:

Primary Goal: Describes what will be used to determine success of the experiment

#### Other Measurable Goals:

Help to complete the picture of users' experiences

Hypotheses are bold statements, not open-ended questions. They address a question with a proposed solution. Crafting a hypothesis to address an open question or problem on your website enforces a well-rationalized, thoughtful proposal for how to address that problem.

# TEC HNI CAL

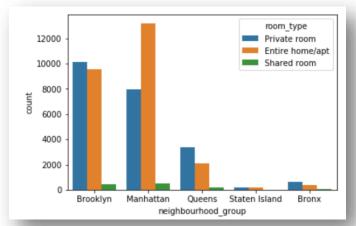
PROBLEM - Talking about North America we are aiming to know about the best for renting assets among -

- Private Room
- Shared Room
- Entire home/apartment

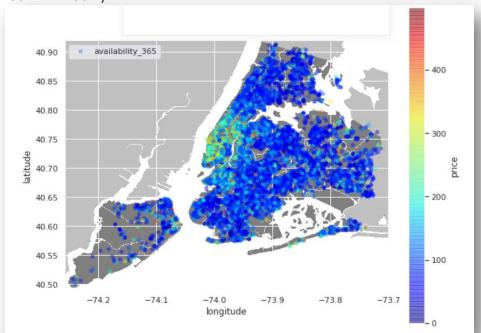
In NYC (discretely in Manhattan, Brooklyn, Queens, Bronx, Staten Island), for maximizing the {profit-expenditure} ratio.

**Construct Hypothesis**- The null hypothesis is that **Manhattan** with a shared apartment would fetch the largest profit. The alternative hypothesis is that it's not **Manhattan**.

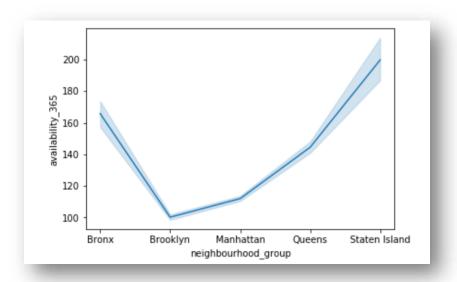
**Solution**- According to the stats of AIR BNB data 2K15 following visuals are extracted from the report.



• By graph 1 - the presence of an entire apartment is most in Manhattan and Private room in Brooklyn.



• The map clearly shows that Queens is the most expensive of all and Brooklyn and Manhattan are at an equal pace here.



#### FROM AVAILABILITY GRAPH

- Manhattan availability can be a curse because of the settled owners.
- With least availability, appropriate price, and the location of Brooklyn, it seems the best choice for expansion of Business

**RESULT-** Null Hypothesis has been contradicted by the facts above and the report aforementioned.

Alternative Hypothesis has been taken into consideration.

"According to the report, the Private rooms in Brooklyn, has been proposed for the maximum profit-exp.l ratio."

# NON TEC HNI CAL

#### Can Locust Attack cause Starvation in India.

As India struggles to contain the Covid-19 pandemic, it faces a new challenge. Several parts of the country have experienced heavy infestations of locusts – an insect that devours crops and foliage, often leaving devastation in its wake. Locust is an insect that belongs to the family of grasshoppers. These insects are essentially harmless unless they meet certain circumstances under which they become more abundant and change their behaviour. India, Pakistan, and Iran are currently thinking over the locust plague threat lingering over their economies. When these locusts meet suitable environmental conditions, they become gregarious and start breeding abundantly. With their population becoming denser, they form swarms and keep moving across areas damaging the crops. These swarms attacking crops and thereby devastating the entire agricultural economy is what is commonly referred to as *locust plague*.

After Iran and Pakistan, the locust swarm has entered India and the forecasting officers have already warned the country against experiencing the worst locust situations in decades. This means that the country that is already dealing with a drastic economic and health crisis due to COVID-19 is on the verge of facing the worst agricultural crisis as well. According to the Ministry of Environment, Forests and Climate Change, "Locust swarm from Pakistan has entered Rajasthan, Punjab, Haryana and Madhya Pradesh, threatening major damage to standing cotton crops and vegetables. Rajasthan is the most affected state. During the current year, the swarm of locusts has entered India earlier than their normal time of June and July.

Desert locust are a direct threat to the food security of a country. In favourable conditions, a locust swarm can cover an area from less than one square kilometre to several hundred square kilometres. As mentioned in a report published in The Hindu, a swarm of desert locust containing around 40 million locusts can consume (or destroy) food that would suffice the hunger need of 35,000 people, assuming that one person consumes around 2.3 kg of food every day.

#### In order to break a locust swarm apart:

- We can increase the randomness or "noise" a swarm experiences, then we might be able to break it apart. This idea might be harnessed as a swarm-management strategy, using low-flying planes to create atmospheric disturbance to disrupt locusts.
- By burning tyres to create an exclusion zone, catching them in nets or digging trenches.
   At best, these local measures will prevent locusts from reaching a particular area, but can do little to halt the progress of the swarm.
- Biological control mechanisms:- Natural predators such as wasps, birds and reptiles may prove effective at keeping small swarms at bay. However, for managing more established swarms, newly-developed targeted microbial biopesticides, such as the fungus-based "Green Muscle", offer a larger-scale solution.