Listings123
Frame A Business Problem
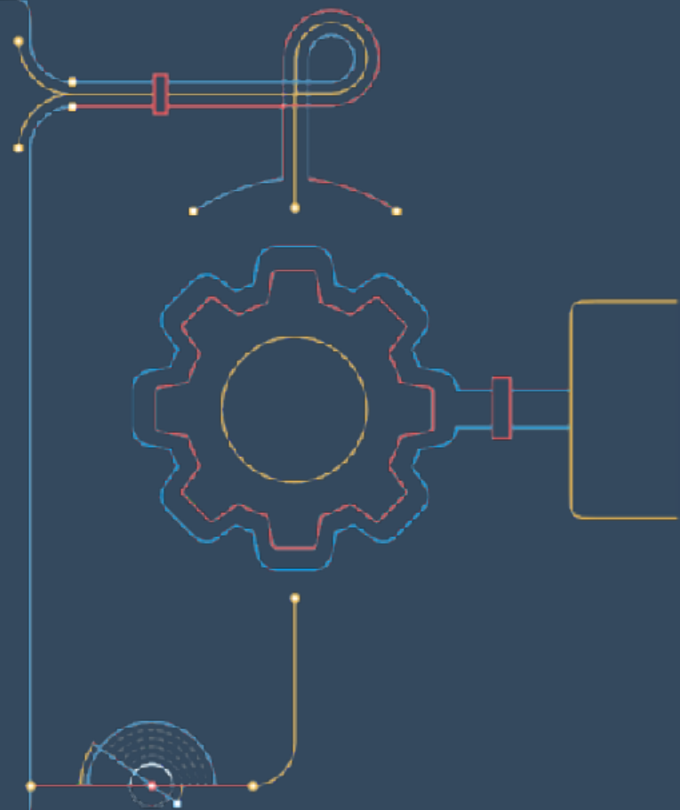
WHO: Who is involved in the problem/project?
● Johnny (Chief Executive Officer (CEO)) ● Stevie (Analytics Manager) ● Me (Data Analytics) ● Marketing Team ● Investors ● Venture Capitalists ● Employees ● Hosts ● Guests

WHAT: What problem has to be solved? What data would you need in order to solve that problem? What would be the ideal solution for that problem? What happens if the problem is not solved?

Listings123 does not have enough funding to expand to new cities.
Investors and VCs won't fund until they are presented with data-based evidence on what traits make a successful host for Listings123.
The ideal solution for the problem would be to collaborate with th emarketing team to find specific traits within Listings123's data and implementing subject matter expertise with marketing and analytics to guide the investigation.
If the problem is not solved, the CEO might not get any funding to expand to other cities.

WHERE: Where does the problem occur? Where do you need to solve the problem?

The problem occurs in the company itself, as it is a very young company, they do not have the resources to determine the qualities or actions that make their hosts successful.
The problem needs to be fixed by collaborating with the marketing team and implementing subject matter expertise with marketing and analytics.

WHEN: When does the project need to be completed? When does the issue occur?

I (the analyst) is given **2 weeks** to find insights within the data and provide a data-based recommendation to identify successful host traits.
The background information does not include specifically state how long the CEO is having trouble convincing the investors and VCs to provide him with funds.

WHY: Why should this problem be solved? Why does the issue occur?

This problem needs to solved to help convince the investors and VCs to provide with the funding for expansion.
Possible reasons the problem occurs:
- Not enough resources to determine the qualities or actions that make their hosts successful.
- Unsuccessful hosts
- Unsatisfied customers
- Strong competition (like Airbnb)

Understand Listings123's Stakeholders

Who are your stakeholders?

Internal:
- **Johnny (Chief Executive Officer (CEO))**
- **Stevie (Analytics Manager)**
- **Me (Data Analyst)**
- **Marketing team**
- **Employees**

External:
- Guests
- Hosts
- Investors
- Venture Capitalists

Understand Listings123's Stakeholders

How is each stakeholder involved? What can each stakeholder contribute to the project?

Internal Stakeholders:
- Johnny (CEO): Johnny is the CEO of the business. Johnny (likely alongside his investors) will use the data to make the final decision about whether to invest in branching out to different cities or not. As an analyst, I will need to use the data to help her convince other investors and venture capitalists.
- Stevie (Analytics Manager): Stevie, being an analytics manager will engage with other business stakeholders to grasp their analytical needs, develop plans with me (the data analyst) and effectively convey analytical results to the non-technical stakeholders.
- Me (Data Analyst): The analyst will investigate the data and provide a recommendation to address the problem. The analyst will also need to present the data-based recommendation to a less-technical CEO (Johnny) to help him convince the other stakeholders.
- Marketing Team: The marketing team collaborates with the analyst to find specific traits within Listings123's data.

How is each stakeholder involved? What can each stakeholder contribute to the project? *(continued)*

- Employees: The employees are not directly involved in the problem, but they could be affected negatively if the problem is not fixed. For example, if the investors and VCs are not convinced, they might not provide with the funding for the marketing campaign which could lead to having to shut down the campaign, and they might lose their jobs.

External Stakeholders:

- Investors and Venture Capitalists: The company's investors provide financial support to the business and are involved in high-level decision-making. Like Johnny, they will need to be convinced whether to invest in the marketing campaign using data-based recommendation the analyst provides.
- Hosts: The hosts provide crucial data related to their listings, booking patterns, and guest interactions, enabling comprehensive analysis.
- Guests: The guests contribute to the success/failure of the project. Although, they are not aware that they are involved in the business problem.

Understand Listings123's Stakeholders

Why is your project important to each stakeholder?

Internal Stakeholders:
- Johnny (CEO): The success of the project directly impacts the company's growth and profitability. Positive data-driven insights can guide strategic decisions, enhance the problem, and attract investors.
- Stevie (Analytics Manager): Success in identifying successful host traits through data analysis reinforces the value of analytics in driving business decisions. It validates the analytics team's role in shaping the company's strategy.
- Me (Data Analyst): The project showcases the practical application of my analytical skills and contributes directly to the company's goals. It demonstrates the impact data analysis can have on decision-making.
- Marketing team: Insights into successful host traits inform targeted marketing strategies, maximizing the effectiveness of campaigns and attracting more guests. This, in turn, contributes to the overall success of marketing initiatives.

Why is your project important to each stakeholder? *(continued)*

- Employees: A successful project enhances the company's stability and growth, potentially leading to more opportunities, job security, and a positive work environment.

External Stakeholders:

- Investors and VCs: The project's success is important for attracting investment. Demonstrating data-driven strategies to enhance the platform's competitiveness can make Listings123 a more appealing investment.
- Guests: Guests benefit from the project by experiencing an improved and tailored platform.
- Hosts: Hosts are essential stakeholders as their success is intertwined with the platform's success. Understanding successful host traits can empower hosts to optimize their listings, increase bookings, and build a positive reputation.
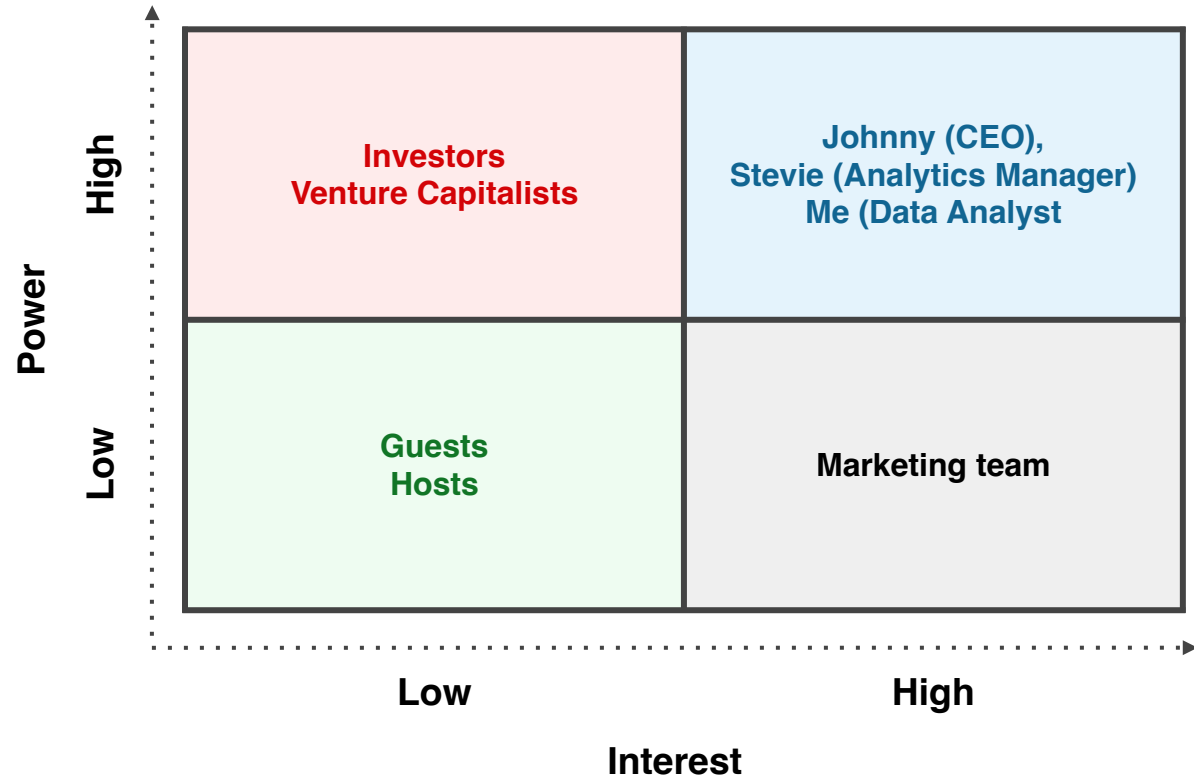
What data do you have access to?

a) How large is your sample data set (in terms of rows and columns)?

Rows: 9

Columns: 15

a) What information do your columns contain?
- HostID: This is a unique ID for each host.
- City: City to which the host/listing belongs to.
- State: State of the host/listing.
- Room type: Type of room the listing provides.
- Bathrooms: Number of bathrooms

What data do you have access to? (continued)

(b) What information do your columns contain?
- Bedrooms: Number of bedrooms
- Beds: Number of beds
- Bed type: Type of bed
- Amenities: List of amenities offered
- Price: Cost of accommodation (per night, USD)
- Cancellation policy: Cancellation policy
- Number of reviews: Number of reviews
- Days listed: Number of days listed
- Review scores location: The median location score for the listing based off of reviews
- Review Scores value: The median value score for the listing based on reviews

What data do you have access to? *(continued)*

c) What data types do your columns contain?

What columns are *qualitative?*
HostID, City, State, Room Type, Bed Type, Amenities, Cancellation Policy

What columns are *quantitative*?
Bathrooms, Bedrooms, Beds, Proce, Number of Reviews, Days Listed, Review Scores Location, Review Scores Value

Explore Listings123's Data

What data is important to the problem? Why do you think certain columns are important?

- Investor Interest and Engagement:
  Data needed: Interaction history, responses, and engagement metrics from potential investors to gauge their interest and willingness to invest.
- Marketing Campaign Effectiveness:
  Data needed: Performance metrics of previous marketing campaigns, including user acquisition rates, conversion rates, and return on investment.
- User Feedback Reviews:
  Data needed: Guest and Host feedback on the platform's current offerings and experiences to identify strengths, weaknesses, and areas for improvement.
- Platform Growth Metrics:
  Data needed: Historical data on user growth, listing expansion, and revenue generation to demonstrate the platform's potential for success with additional investment.
- Competitor Analysis:
  Data needed: Insights into competitors' strategies, market share, and user satisfaction to position Listings123 competitively.

Explore Listings123's Data

What data is important to the problem? Why do you think certain columns are important? (continued)

- City Expansion Costs:
  Data needed: Cost projections for expanding to new cities, including marketing expenses, operational costs, and potential returns on investments.
- Success Metrics for previous expansions:
  Data needed: Performance data from previous city expansions, including user adoption rates, host sign-ups, and booking numbers.

Explore Listings123's Data

Is the data enough to solve the problem? If not, what data do you need?

The data provided for Listings123 is not sufficient to fully address the problem. To effectively solve the issue of budget constraints and convince investors to fund a marketing campaign for expansion, additional data is crucial. Specifically:

- Investor Interest and Engagement:
  Detailed information on investor interactions, responses, and engagement metrics is needed to gauge investor interest and tailor the pitch accordingly.
- Marketing Campaign Effectiveness:
  Comprehensive performance metrics from previous marketing campaigns, including user acquisition rates, conversion rates, and return on investment, are essential for presenting a convincing case to investors.
- User Feedback and Reviews:
  In-depth insights from guests and host feedback regarding the platform's strengths, weaknesses, and

Explore Listings123's Data

Is the data enough to solve the problem? If not, what data do you need?

Ares for improvement are necessary to address user concerns and enhance the platform's appeal.

- Platform's Growth Metrics:
  Historical data on user growth, listing expansion, and revenue generation is vital to demonstrate the platform's scalability and potential for success with additional investment.
- Competitor Analysis:
  Detailed competitor insights, including s strategies, market share, and user satisfaction data, are essential for positioning Listings123 competitively and showcasing its unique value proposition.
- City Expansion Costs:
  Accurate cost projections for expanding to new cities, covering marketing expenses, operational costs, and potential returns on investment, are required to estimate the impact of the proposed campaign.
- Success Metrics for Previous Expansions:
  Performance data from previous city expansions is crucial for illustrating the success and potential of