



# Strengthening Airbnb's Trust Infrastructure for Sustainable Growth

University of Waterloo - Master of Digital Experience Innovation  
DEI 627: Business Planning & Feasibility Analysis  
Prepared for Professor K. de Laat | Prepared by Group 7

 View full report at [tinyurl.com/627-airbnb-report](https://tinyurl.com/627-airbnb-report)





# Introduction

Airbnb is a global platform connecting travelers with unique stays and experiences. As a leader in the sharing economy, it transforms rentals by leveraging a peer-to-peer model.

This report evaluates **the feasibility of an initiative to enhance trust of Airbnb** by improving user safety, identity verification and communication between hosts and guests with the goal of increasing booking activity.

## WHY AIRBNB?



Clear problem statement and well-defined strategies.



Strong financial projections, with significant revenue potential.



Existing market presence and robust user data.



The other plans were deemed less viable due to scope, scalability, and competition.

Read more about our other business plan sketches at [tinyurl.com/627-sketches](https://tinyurl.com/627-sketches)



## MEET THE AUTHORS



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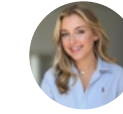
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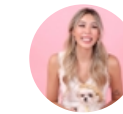
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# Feasibility Analysis Overview



## TECHNOLOGICAL

Explore Airbnb’s existing infrastructure, the new systems needed, and potential challenges to see if this trust-enhancing initiative is truly feasible.



## MARKET

Dive into industry trends, user demand, competition, and Airbnb’s position to see if strengthening trust can drive growth.



## FINANCIAL

Examine revenue projections, costs, and ROI to determine whether investing in trust enhancements makes financial sense for Airbnb.



## ORGANIZATIONAL

Look into Airbnb’s ability to successfully implement the trust-enhancement initiative by assessing its existing structure, staffing, and resources.



# Technological Feasibility

## RESOURCES

### Bighead

Airbnb's machine learning platform for risk detection



Real-time data processing for identity verification and safety monitoring



Scalable cloud infrastructure for secure data storage and processing

## INNOVATIONS NEEDED



### Continuous verification

Ongoing identity checks to enhance trust



### Safety alerts

Real-time notifications for potential security risks

## CHALLENGES



### Privacy compliance

Ensuring alignment with global data protection regulations (e.g., GDPR, CCPA)



### UX impact

Balancing upgrades with a seamless user experience



## CONCLUSION

✓ FEASIBLE

Existing tech stack supports implementation with necessary adaptations.



# Market Feasibility

## TARGET AUDIENCE



**Guests:** 78% of travelers make safety their top priority when deciding on accommodations.



**Hosts:** 65% of hosts worry about guest behavior and the safety of their property with each booking.

## IDENTIFIED PAINPOINTS



The **loss of bookings due** to guests choosing more secure options like hotels or other competitors with improved safety measures.



Hosts will **participate less**, even if a listing is readily available to the public due to fear of damage or theft.

## MARKET TRENDS



Airbnb has 200 million active users, **8 million listings** across 220+ countries, catering to a diverse customer base.



Leisure travelers seek **safe, affordable** options, while business travelers prioritize **flexibility, efficiency**, and **cost-effectiveness**.



**Monetizing unused spaces** on a trusted platform lets property owners earn income by offering short-term rentals.

## TOP COMPETITORS' MARKET SHARES



19.3%



17.4%



**17.0%**



15.3%



## CONCLUSION

✓ **FEASIBLE**

Initiative addresses key concerns, providing a clear opportunity to enhance user experience and platform security.



# Financial Feasibility

## COST ESTIMATE

**USD 109.5m**

Including investments in technical development and marketing

## BREAK-EVEN POINT

**3.42m bookings**

required to break even, just 0.7% of last year’s bookings (491.5 million)

## ROI

**261%**

Efficient return: \$285.7m profit vs. \$109.5m investment (yielding \$2.61 in profit per dollar invested)

## FINANCIAL RISKS

Key risks include **lower user adoption, regulatory changes,** and **security breaches** – mitigated through proactive strategies.

Item	Amount (\$)
Project revenue	471,102,750
Salaries	942,917
Marketing	23,555,137
Technical development	84,798,495
Rent, hardware, travel	169,200
<b>Total costs</b>	<b>109,465,749</b>
Pre-tax income	361,637,001
<b>After-tax income*</b>	<b>285,692,231</b>

\*assuming flat rate tax of 21% (PricewaterhouseCoopers International Limited, 2025)



## CONCLUSION

✓ **FEASIBLE**

Initiative is financially viable, with a \$471M revenue increase and a 261% ROI, ensuring quick profitability.

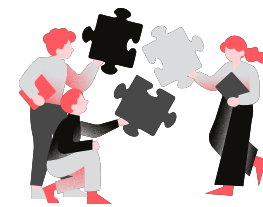


# Organizational Feasibility



## MATRIX ORGANIZATIONAL STRUCTURE

Airbnb has cross-functional teams in which employees to report to multiple leads in cross-functional efforts



## MULTIDISCIPLINARY, EXISTING TEAMS

Includes in-house engineers and developers, UX designers, a project lead, legal and compliance support, and marketing and operations staff



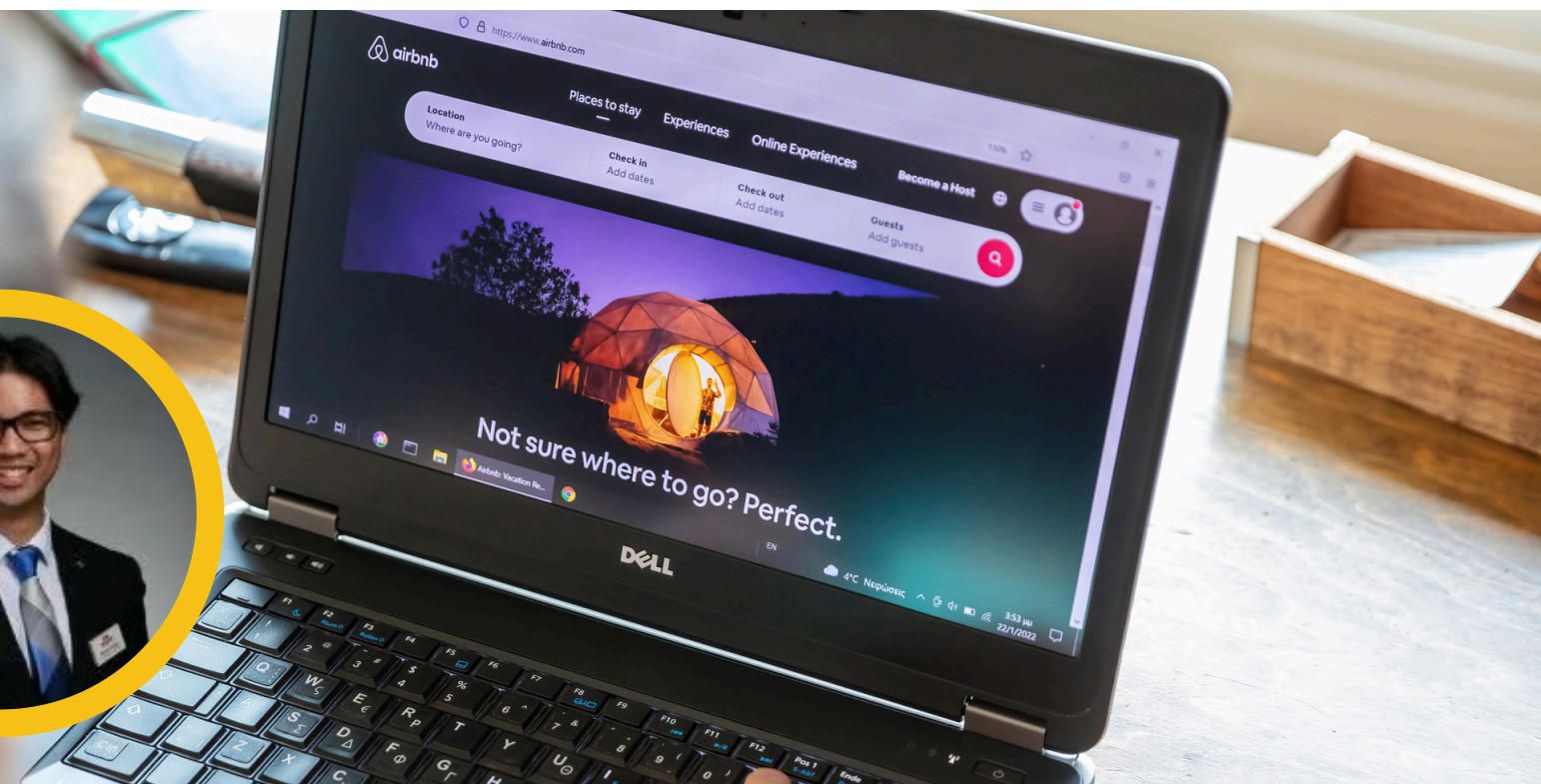
## AGILE, EMPOWERED WORKFORCE

Airbnb's structure promotes agile workflows, empowering teams with autonomy and flexibility, enabling faster development cycles.



## FORMAL RELATIONS + EMPLOYEE POSITION + DEPARTMENT DESIGN

Its existing structure provides these three principles of organizational planning, ensuring efficiency, accountability, and effectiveness.



## CONCLUSION

✓ FEASIBLE

Existing teams and culture make project implementation feasible.



# Decision-Making Process

Area	Criteria	Weight	Score	Weighted score	Rationale
Financial	ROI, financial resilience, revenue potential, break-even-point, profitability	27%	4.5	1.22	Strong revenue potential (\$471M) and ROI (261%). Cost structure is realistic and break-even is achievable.
Market	Market demand, trends, market growth	25%	4.8	1.2	There is a feedback loop and strong demand for trust features. Safety is prioritized and post-pandemic trends support feasibility.
Technical	Existing capabilities, innovation requirements, scalability, technical risks	25%	4	1	Airbnb's tech infrastructure supports the features. Some custom development required but manageable.
Organizational	Organizational culture, team collaboration, alignment with goals	23%	4.2	0.97	Matrix structure and agile processes support rollout. Timeline and staffing are realistic. Legal issues are managed.
Total score				4.39	

## FINAL DECISION



After analyzing technological, market, financial, and organizational feasibilities, this project was **deemed feasible** in all areas with a strong potential for a positive ROI.

The project is estimated to be implemented within ten months and begin profiting shortly post-launch with risk mitigation plans in place. It is recommended to move forward with the project.





# Risks & Mitigation

## RISKS BEFORE MARKET



### Compliance & Privacy

Compliance with privacy laws (GDPR, CCPA) is crucial to avoid legal issues and reputational damage.



## MITIGATION

Conduct external privacy audits and region-based testing for regulatory alignment.

## RISKS AFTER MARKET



### Data Breaches

Data breaches could erode user trust and lead to financial/legal consequences.



Strengthen encryption protocols and implement a crisis response plan.



### User Trust

Users may resist new verification measures due to privacy concerns.



Offer opt-in flexibility, highlight security benefits, and provide adoption incentives.





# Timeline & Next Steps

Each feature follows a structured process, ensuring user-centric research and design, rigorous testing, and effective implementation.

**PHASE 1**  
**Enhanced Identity Verification**  
Enhances user authentication with advanced verification and continuous monitoring.

**PHASE 2**  
**Improved Safety & Security**  
Develops and implements safety and security features to improve user trust.

**PHASE 3**  
**Foster Community Involvement & Reputation**  
Develops initiatives to foster community engagement and build trust in the Airbnb community.

**PHASE 4**  
**Improve Communication & Disclosure Amongst Users**  
Implement communication features & policies to promote clarity and transparency between users.



PROJECT STAGES	MONTH 1	MONTH 2	MONTH 3	MONTH 4	MONTH 5	MONTH 6	MONTH 7	MONTH 8	MONTH 9	MONTH 10
PHASE 1	Research, design, and develop enhanced identity verification features.									
Enhanced Identity Verification										
Research and user feedback on verification needs										
Design and prototyping of verification features										
Development of verification system integration										
Internal testing, bug fix, and refinement										
External pilot testing and A/B testing										
Refinement based on user data and feedback loop										
PHASE 2	Develop and implement safety and security features to improve user trust.									
Improved Safety & Security										
Research and user feedback on safety and security needs										
Design and prototyping of security features										
Development of security system integration										
Internal testing, bug fix, and refinement										
External pilot testing and A/B testing										
Refinement based on user data and feedback loop										
PHASE 3	Develop features to foster community engagement and build trust in the Airbnb network.									
Foster Community Involvement & Reputation										
Research and user feedback on verification needs										
Design and prototyping of verification features										
Development of verification system integration										
Internal testing, bug fix, and refinement										
External pilot testing and A/B testing										
Refinement based on user data and feedback loop										
PHASE 4	Implement communication features to ensure better disclosure and transparency between users.									
Improve Communication & Disclosure Amongst Users										
Research and user feedback on verification needs										
Design and prototyping of verification features										
Development of verification system integration										
Internal testing, bug fix, and refinement										
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# Thank you for watching!

**Group 7 (8 members)** | Amrit Kaur Klair, Arvind Karunanathan, Francesca Ferrario, Karen Yao, Karla Renic, Kyle Stacey, Patrick Duran Yutiga, Rachel Han

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