

CS445 / ECE451 / CS645 / SE463
Software Requirements Specification & Analysis

Lean Canvas



Lean Canvas

PRODUCT | MARKET

<p>Problem</p> <p>Top 3 problems</p>	<p>Solution</p> <p>Top 3 features</p>	<p>Unique Value Proposition</p> <p>Single, clear, compelling message that states why you are different and worth buying</p>	<p>Unfair Advantage</p> <p>Can't be easily copied or bought</p>	<p>Customer Segments</p> <p>Target customers</p>
<p>Cost Structure</p> <p>Customer Acquisition Costs Distribution Costs Hosting People, etc.</p>	<p>Key Metrics</p> <p>Key activities you measure</p>		<p>Channels</p> <p>Path to customers</p>	
	<p>Cost Structure</p> <p>Customer Acquisition Costs Distribution Costs Hosting People, etc.</p>		<p>Revenue Streams</p> <p>Revenue Model Life Time Value Revenue Gross Margin</p>	

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AirBed & Breakfast (AirBnB)

Want to make travel more **affordable**, make it easier to **stay with a local** (to experience what it is like to live like a local), and make it easier and cheaper to **be a host** to visitors.

Problem and Customer Segments

Customer Segments

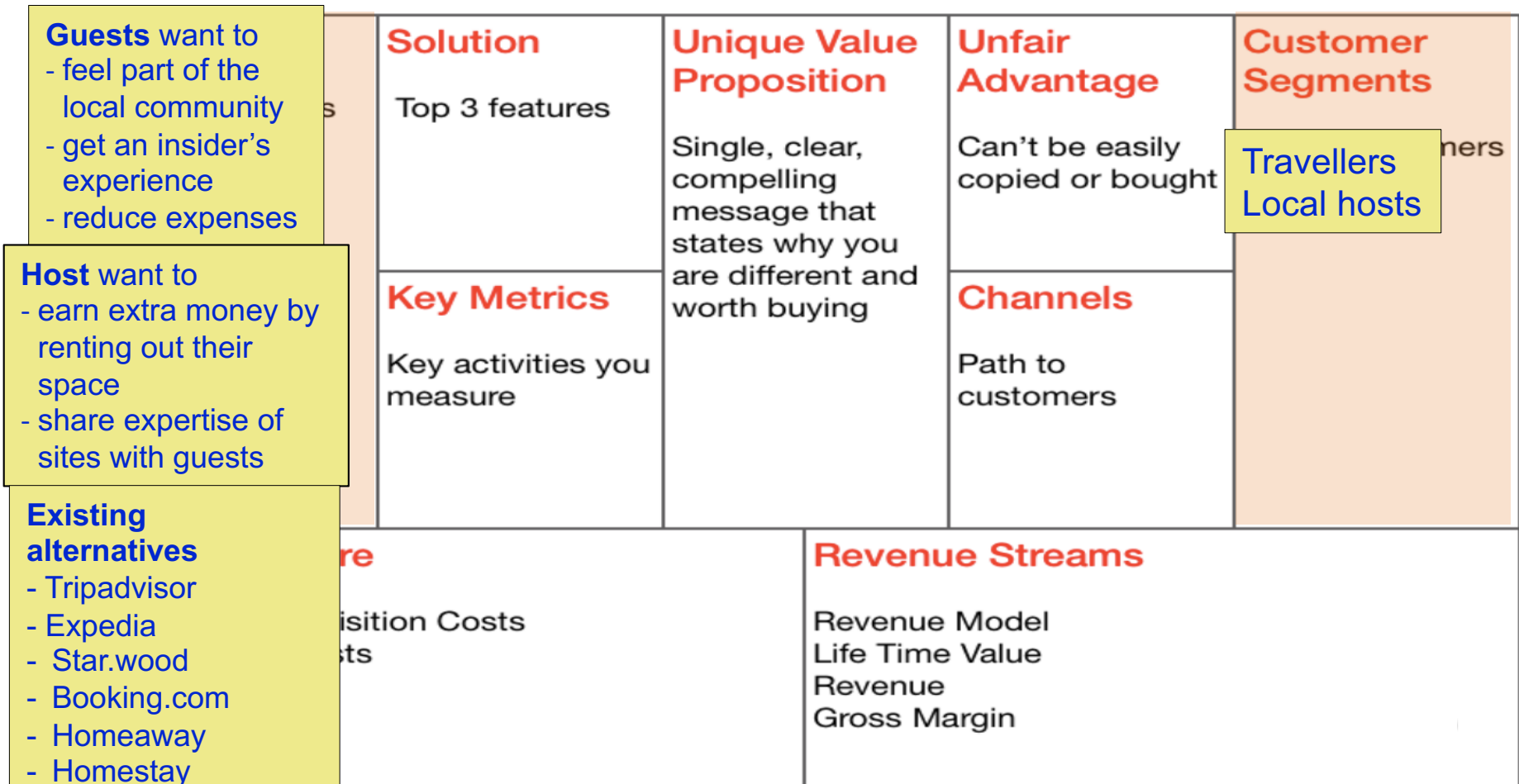
- Brainstorm the list of possible customers, users
- Split broad customer segments into smaller ones
- Target early adopters
- Sketch a Lean Canvas for each customer segment

Problem Segments

- List the top 1-3 problems that each key customer segment needs solved



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Unique Value Proposition (UVP)

“**Unique Value Proposition:** A clear and compelling reason that states why your work is different and worth buying.”

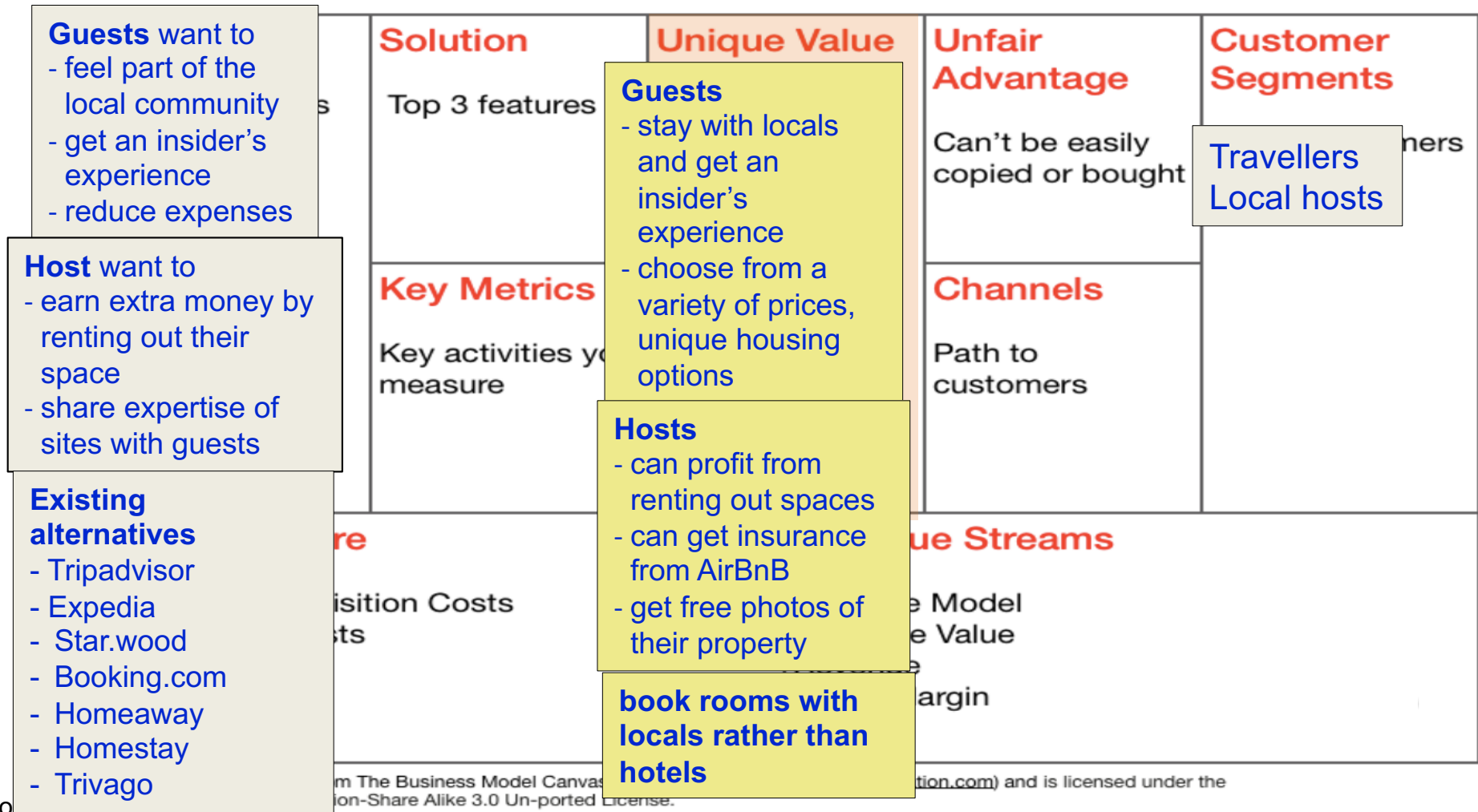
Steve Blank

The Four Steps to the Epiphany

- Be different
- Make sure that your difference matters
- Target early adopters
- Focus on outcome benefits of using the product



AirBnB



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High-Concept Pitch

AirBnb

book rooms with locals rather than hotels

Google Search

to organize the world's information and make it universally accessible and useful

YouTube

Flickr for video

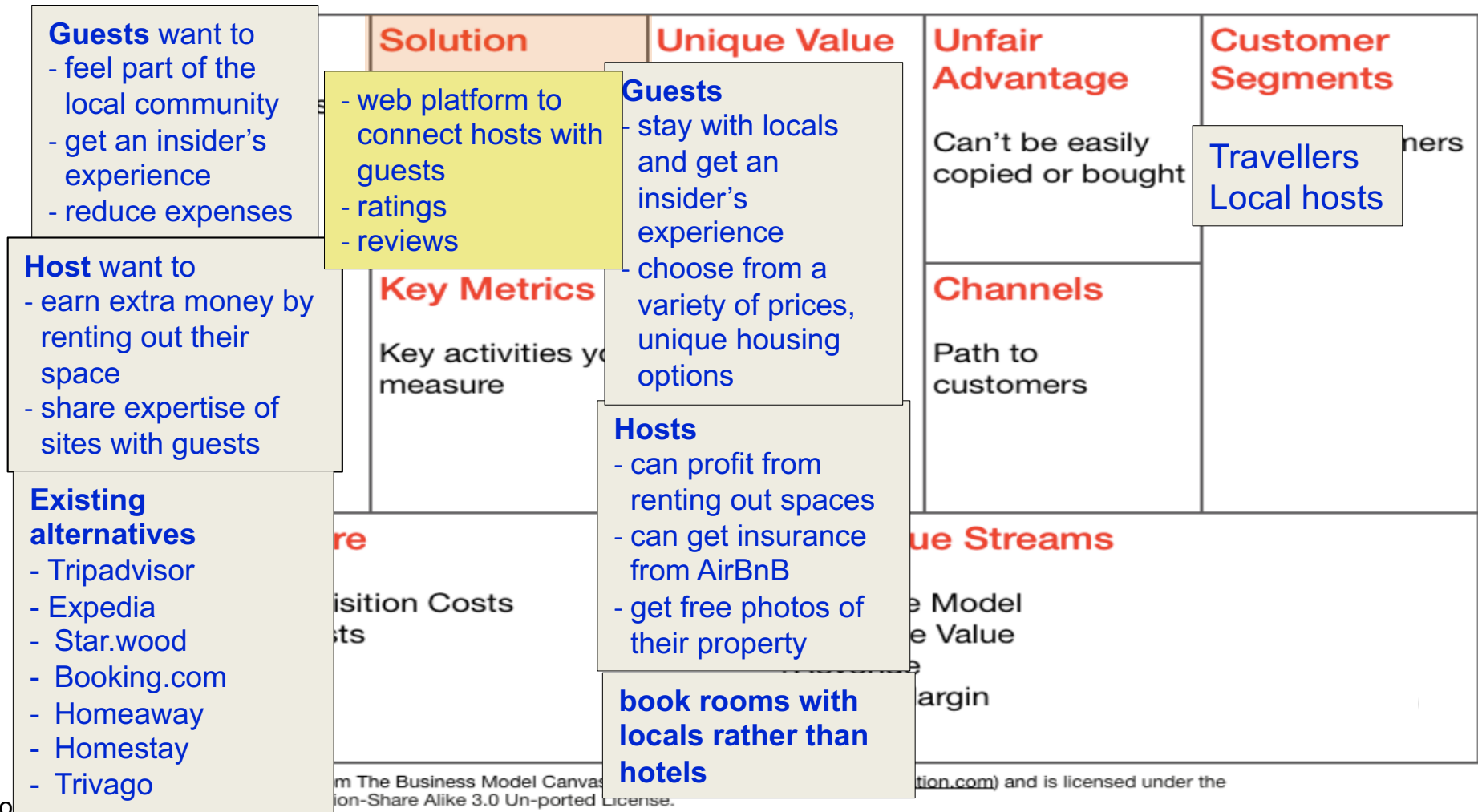
Solution

Because your problems are untested, you will want to wait as long as possible to settle on a solution.

Simply sketch out the simplest thing you can possibly build to address each problem and revise ideas later.



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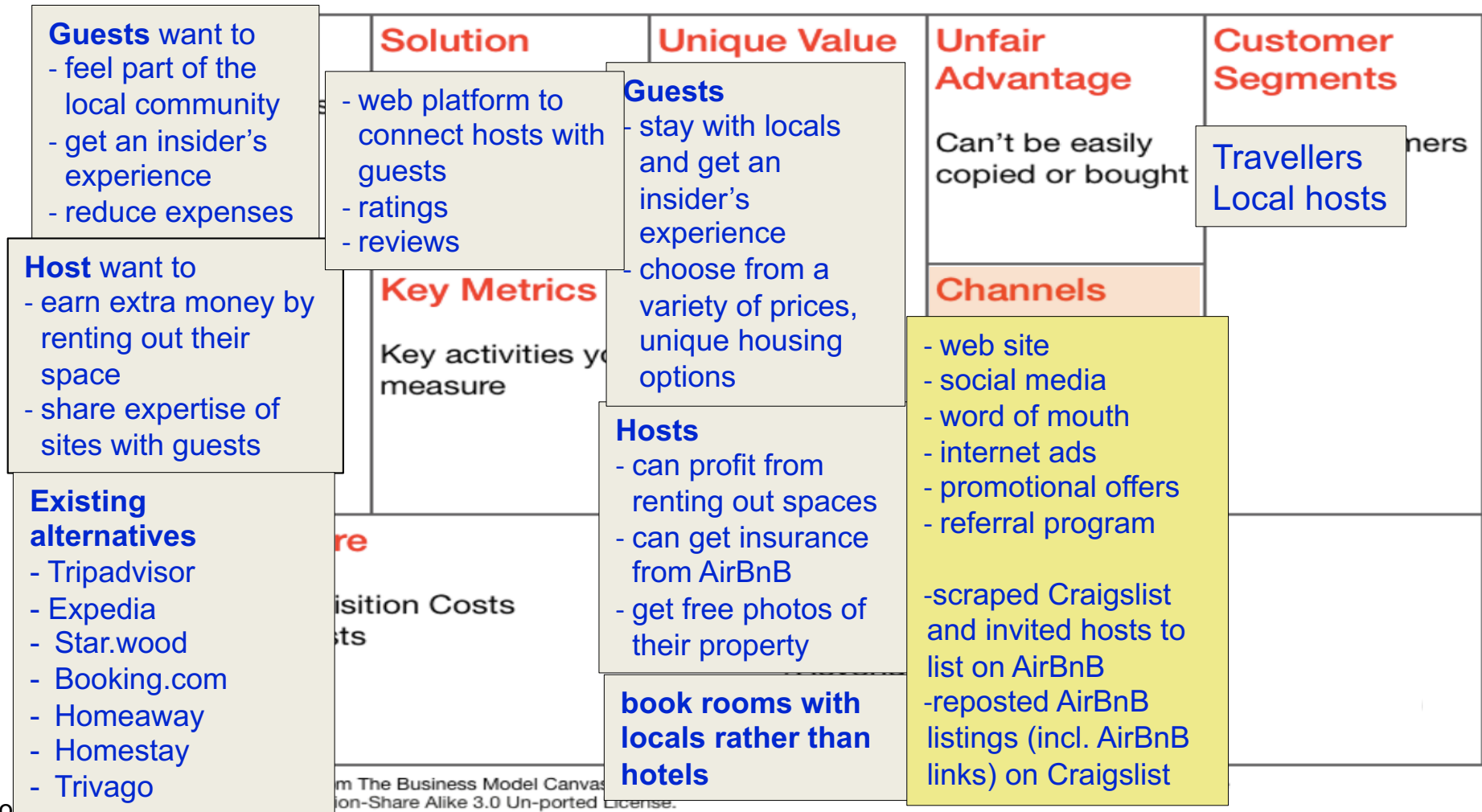
Channels

Channel – a path to your customers

- Best to consider how to reach your target customers early in the process
- You need customers for experiments as well as early adopters
- Consider **inbound channels** that lead customers to find you: e.g., blogs, white papers, talks, webinars



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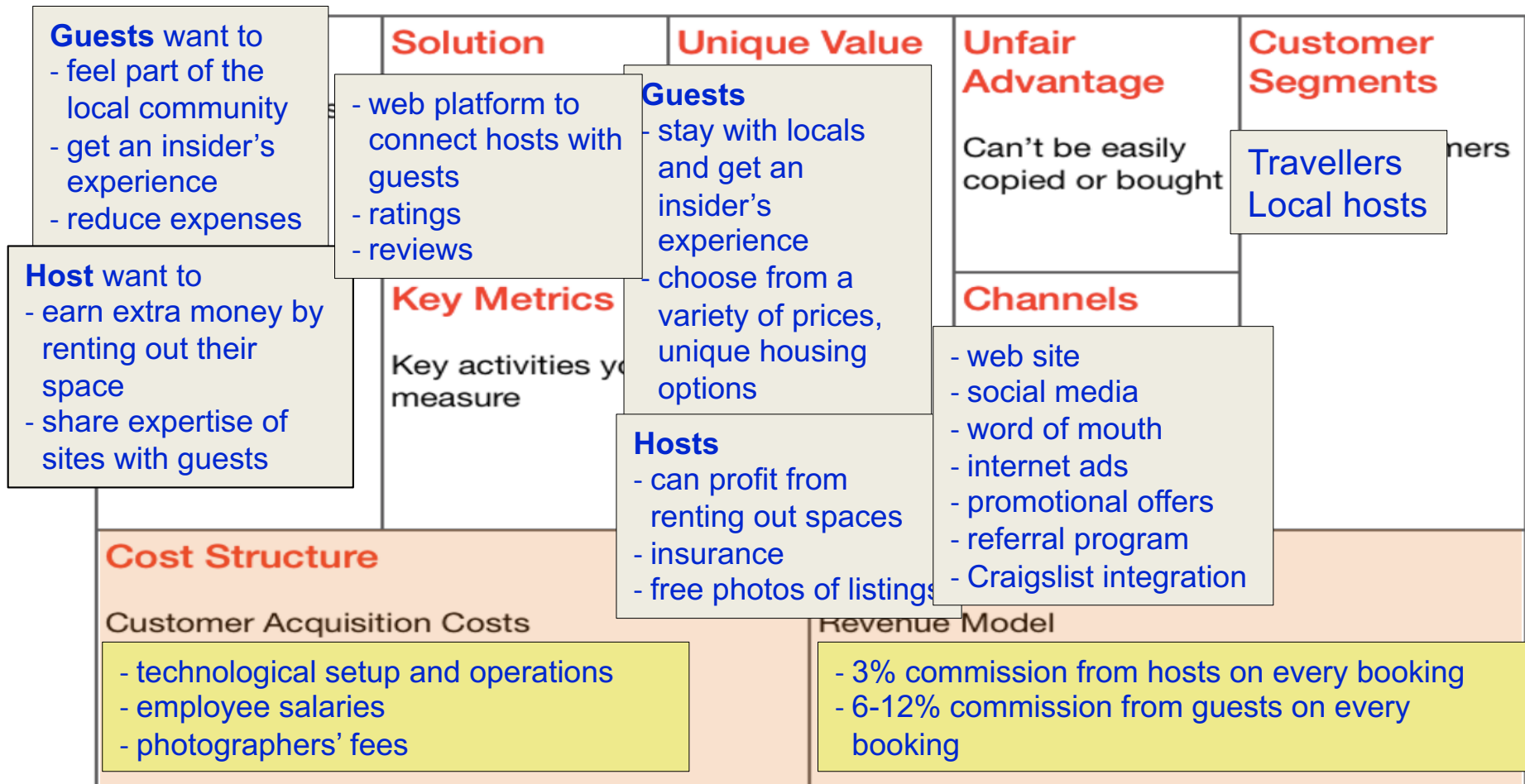
Revenue Streams and Costs

If you plan to eventually charge for your product, you should charge from the start.

- Start with a single pricing plan
- Consider a time-based free trial
- Take costs into account
- Freemium
 - Low or no conversions
 - Long validation cycle
 - Low signal-to-noise ratio in learning
 - Start with the premium part first



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Metrics

Track what matters for measuring success

- Number of users
- Rate of new users
- Number of uses; length of users' sessions
 - how much time spent using product
- Revenue
- Reviews, ratings
- Improvement of users' performance
- Improvement of user's productivity



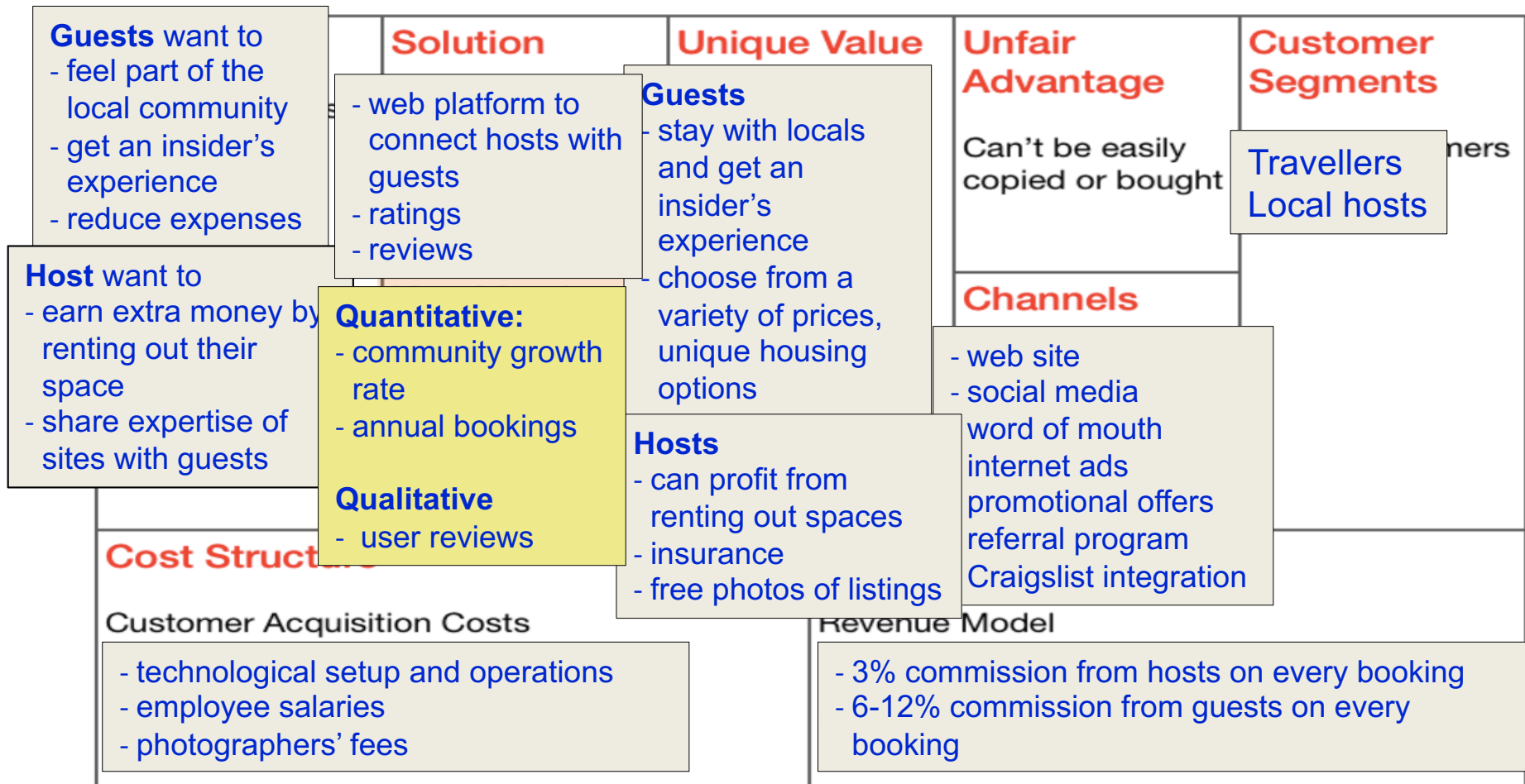
Examples

TABLE 5-1 Examples of financial and nonfinancial business objectives

Financial	Nonfinancial
<ul style="list-style-type: none">■ Capture a market share of X% within Y months.■ Increase market share in country W from X% to Y% within Z months.■ Reach a sales volume of X units or revenue of \$Y within Z months.■ Achieve X% return on investment within Y months.■ Achieve positive cash flow on this product within Y months.■ Save \$X per year currently spent on a high-maintenance legacy system.■ Reduce monthly support costs from \$X to \$Y within Z months.■ Increase gross margin on existing business from X% to Y% within 1 year.	<ul style="list-style-type: none">■ Achieve a customer satisfaction measure of at least X within Y months of release.■ Increase transaction-processing productivity by X% and reduce data error rate to no more than Y%.■ Develop an extensible platform for a family of related products.■ Develop specific core technology competencies.■ Be rated as the top product for reliability in published product reviews by a specified date.■ Comply with specific federal and state regulations.■ Receive no more than X service calls per unit and Y warranty calls per unit within Z months after shipping.■ Reduce turnaround time to X hours on Y% of support calls.

Karl E. Wieggers and Joy Beatty. *Software Requirements, 3ed.* Microsoft Press, 2013.

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Unfair Advantage

Some competitive advantage that is hard for competitors to replicate

Examples

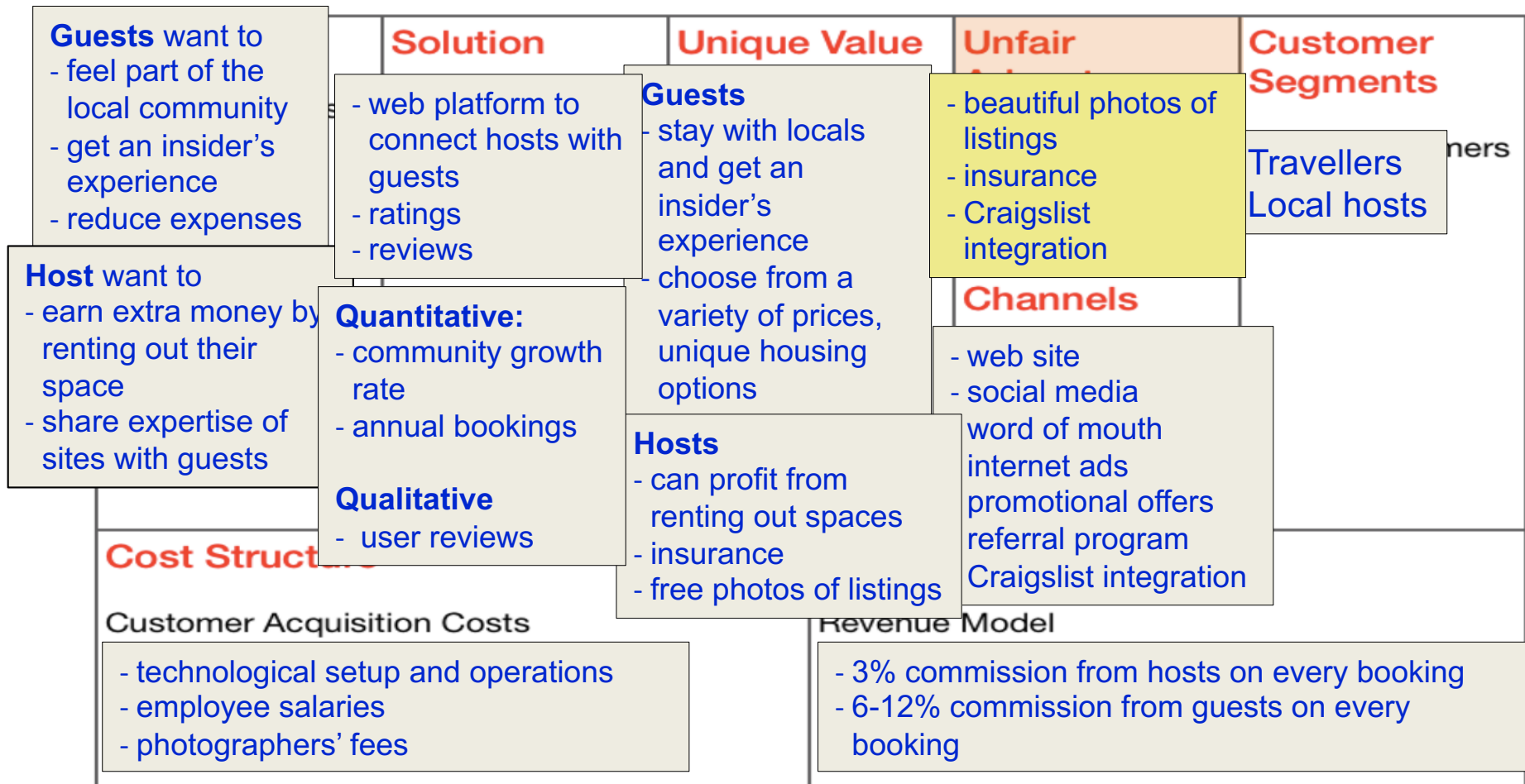
- Reputation
- Special expertise
- Existing customer base
- Proprietary data
- Integrations with quality complementary services

NOT

- Lower price
- Easy to copy features

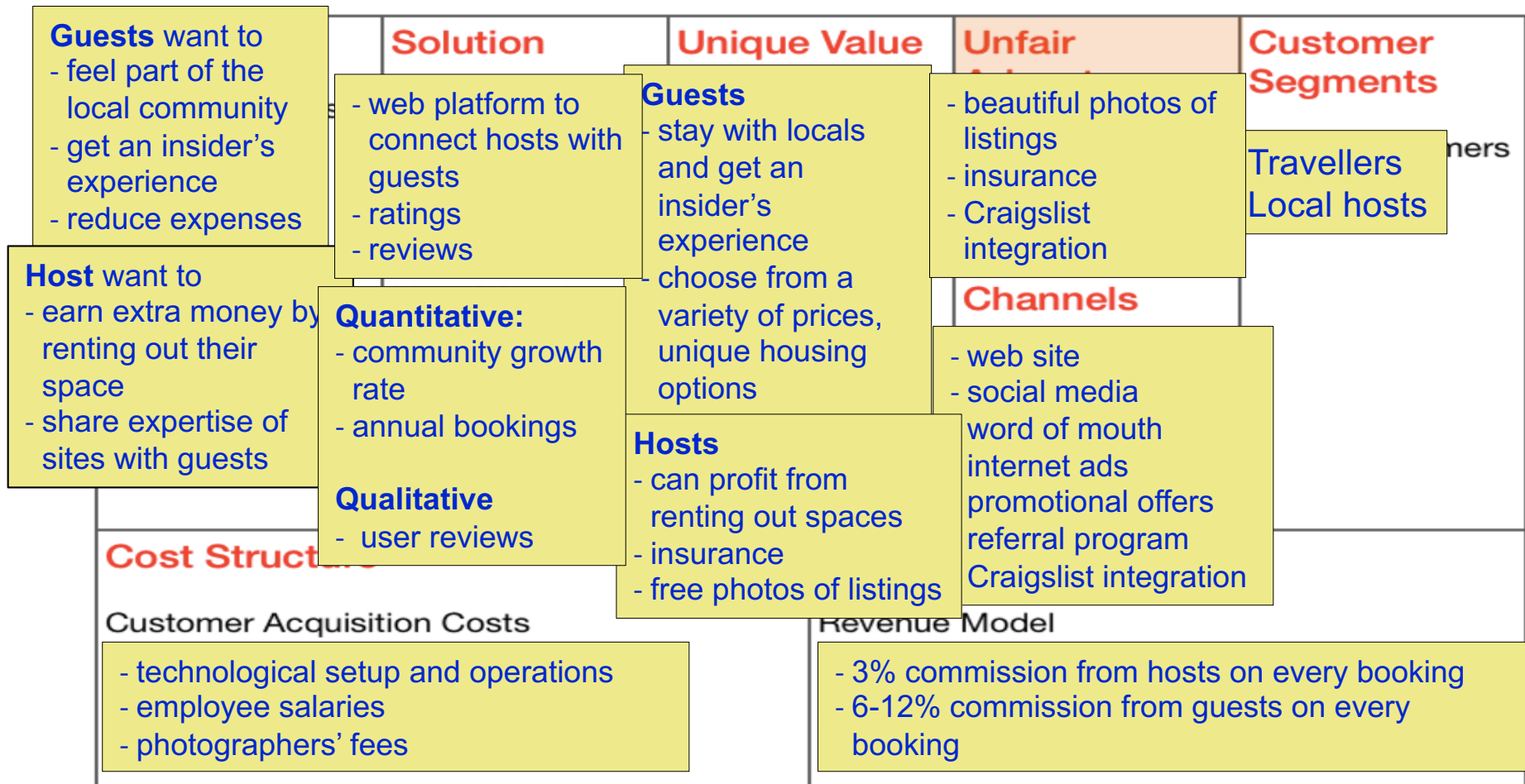


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<https://agileleanlife.com/the-lean-startup/>



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