

ResLiki: A Restaurant Reservation Liquidity System

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Abstract

This will be written at the end

Contents

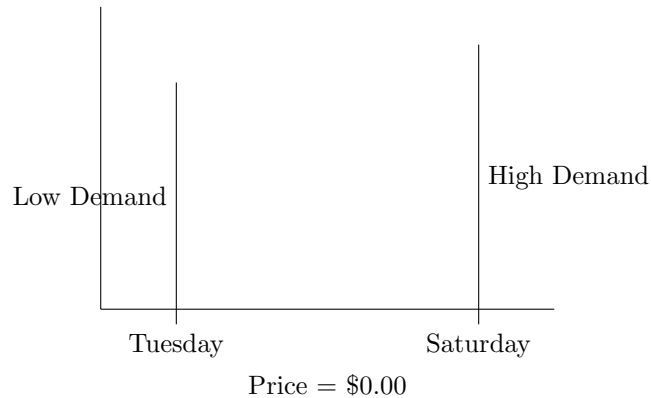
1	Introduction	3
2	Why has no-one done this before?	4
2.1	What makes ResLiki different?	4
2.1.1	Primary Trading Transaction Overview	4
2.2	Network Equity	4
3	Implementation	4
3.1	Phone Application	4
3.1.1	Wallet Implementation	4
3.1.2	Fiat On-Ramp	4
3.2	Reservation System	4
4	Blockchain Backend	5
4.1	Currency	5
4.2	Efficient Blockspace	5
5	Auctions	5

1 Introduction

Profitable restaurants have notoriously tight profit margins at 10-15% over their net revenue, which they can only achieve if they manage inventory effectively, upsell high margin items like alcohol and coffee, and staff great people. All while maintaining the quality of their food and competing with other restaurants on price.

This herculean effort to maintain a razor thin profit margin is undercut because restaurants are giving away one of their assets, the reservation, for free.

An 8:00pm reservation on a Saturday night is valued at the same price as a 5:00pm reservation on a tuesday, \$0.00. While the demand for each of these seats are completely different.



Given each of these seats has completely different demand profiles, how can one currently acquire a prime-time reservation? In one of 3 ways:

- I. Reserve 2 weeks in advance at midnight when the reservations become available
- II. Use American Express or another credit cards concierge service (also well in advance)
- III. Have a good relationship with the Maître'd or the owner

After someone has acquired a prime reservation through the current system, these reservations have no liquidity. They are given away for free and the restaurant loses all control over what happens to the reservation after. Perhaps someone gives it away to a friend, the restaurant has no way of knowing that. There likely exists a secondary market of "Task-Rabbit" people who are paid to stay up to get these prime-time reservations, effectively allowing the reservation to change hands multiple times at no benefit to the restaurant.

Overall, restaurants are missing out on a key income opportunity by not monetizing first the *initial exchange* of the reservation and the subsequent *secondary exchanges* that happen all of the time.

2 Why has no-one done this before?

Companies have tried to implement a reservation exchange on web 2.0 platforms like The issue these companies have struggled with has been the buy in of the restaurants, and the tracking of the exchanges. The restaurants would have to pay a consistent fee to the centralized company running the website and the servers. Frankly, there has never been a well designed system that was done through the buy in of the restaurants, so they have all defaulted to the duopoly of OpenTable and Resy to manage their reservations.

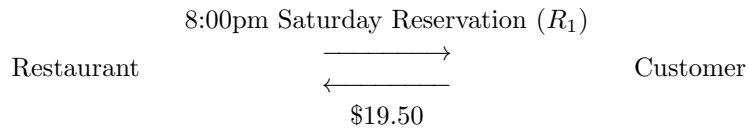
2.1 What makes ResLiki different?

ResLiki is a system where the restaurants will earn the majority of the income generated through the reservation trading system through two income streams:

- I. Primary trading.** A customer buying a reservation directly from the restaurant)
- II. Secondary trading.** A royalty fee (set by the restaurant) for each sale of the reservation on the secondary market.

2.1.1 Primary Trading Transaction Overview

A primary trade is the direct sale of reservation from the restaurant to a customer for a fixed price. In this case an 8:00pm Saturday Reservation (R_1) is exchanged for \$20. A 2.5% transaction fee is applied, giving the restaurant \$19.50 net.



2.2 Network Equity

This is the motivation.

3 Implementation

This is the methodology.

3.1 Phone Application

This is the data collection.

3.1.1 Wallet Implementation

3.1.2 Fiat On-Ramp

3.2 Reservation System

This is the data analysis.

4 Blockchain Backend

These are the results.

4.1 Currency

This is experiment 1.

4.2 Efficient Blockspace

5 Auctions