



What's driving
reservations?

By Jarrod Valentine

Question

What factors are most important for a vehicle's total reservations?

Why?

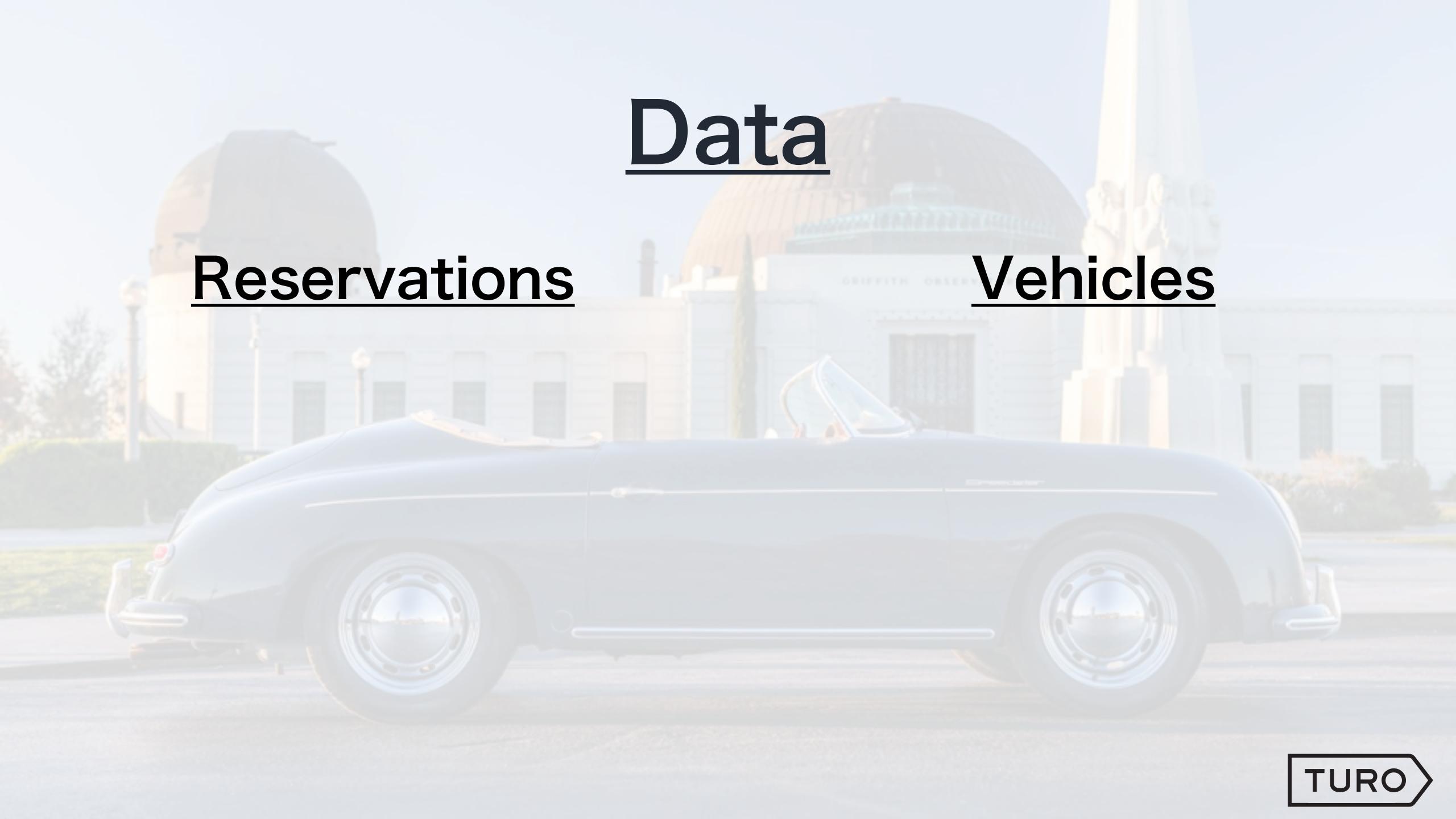
- ➡ Give users recommendations to increase their rental likelihood

Why?

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- ➡ More reservations = happier users

Why?

- ➡ Give users recommendations to increase their rental likelihood
- ➡ More reservations = happier users
- ➡ More reservations = more money

A vintage black Porsche 356 convertible is parked in front of the Griffith Observatory in Los Angeles. The observatory's iconic yellow dome is visible in the background under a clear blue sky.

Data

Reservations

Vehicles

TURO

Data

Reservations

- ➡ Data for completed weekly, daily, and hourly reservations

Vehicles

Data

Reservations

- ➡ Data for completed weekly, daily, and hourly reservations
- ➡ 911 unique vehicles

Vehicles

TURO

Data

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Vehicles

- ➡ Vehicle and user-posting attributes

Data

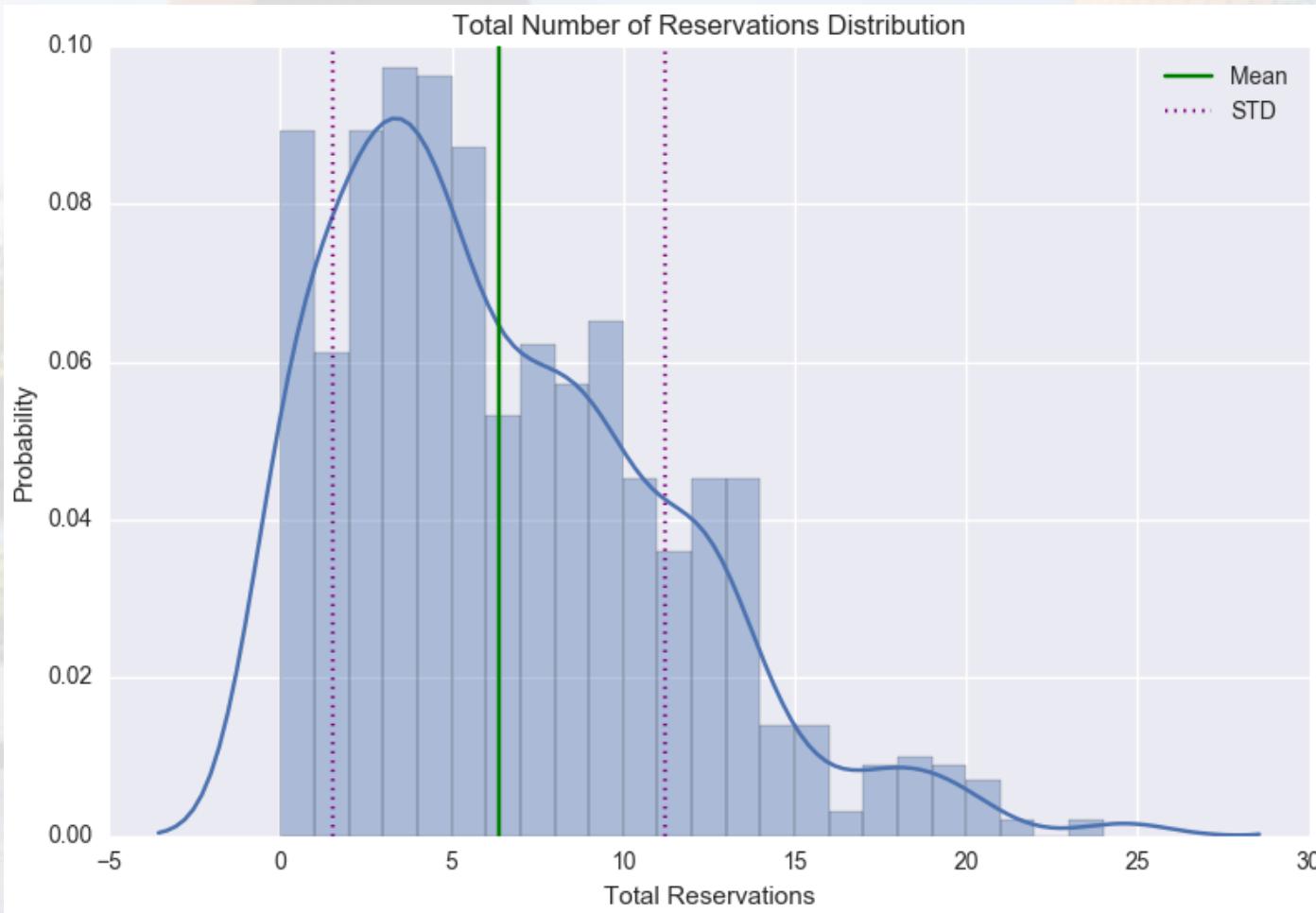
Reservations

- ➡ Data for completed weekly, daily, and hourly reservations
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Vehicles

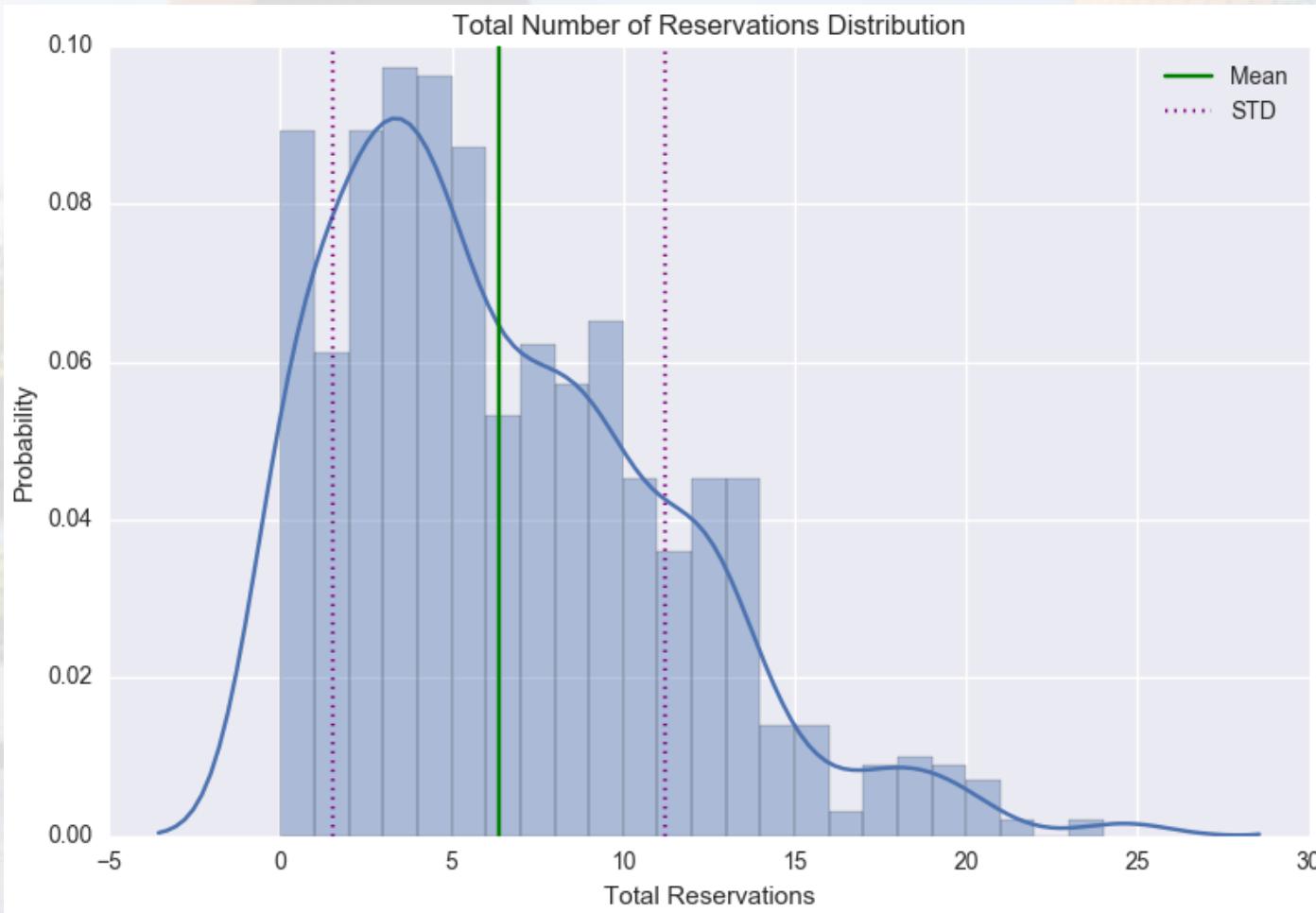
- ➡ Vehicle and user-posting attributes
- ➡ 1000 unique vehicles

Reservations



→ Most vehicles have relatively few reservations

Reservations



- ⇒ Most vehicles have relatively few reservations
- ⇒ We should direct efforts to increase this average

Vehicles

- ➡ Technology: Makes vehicle “instantly bookable”

Vehicles

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- ➡ Street Parking: Whether vehicle is parked on street

Vehicles

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- ➡ Street Parking: Whether vehicle is parked on street
- ➡ Description: Number of characters describing vehicle

Vehicles

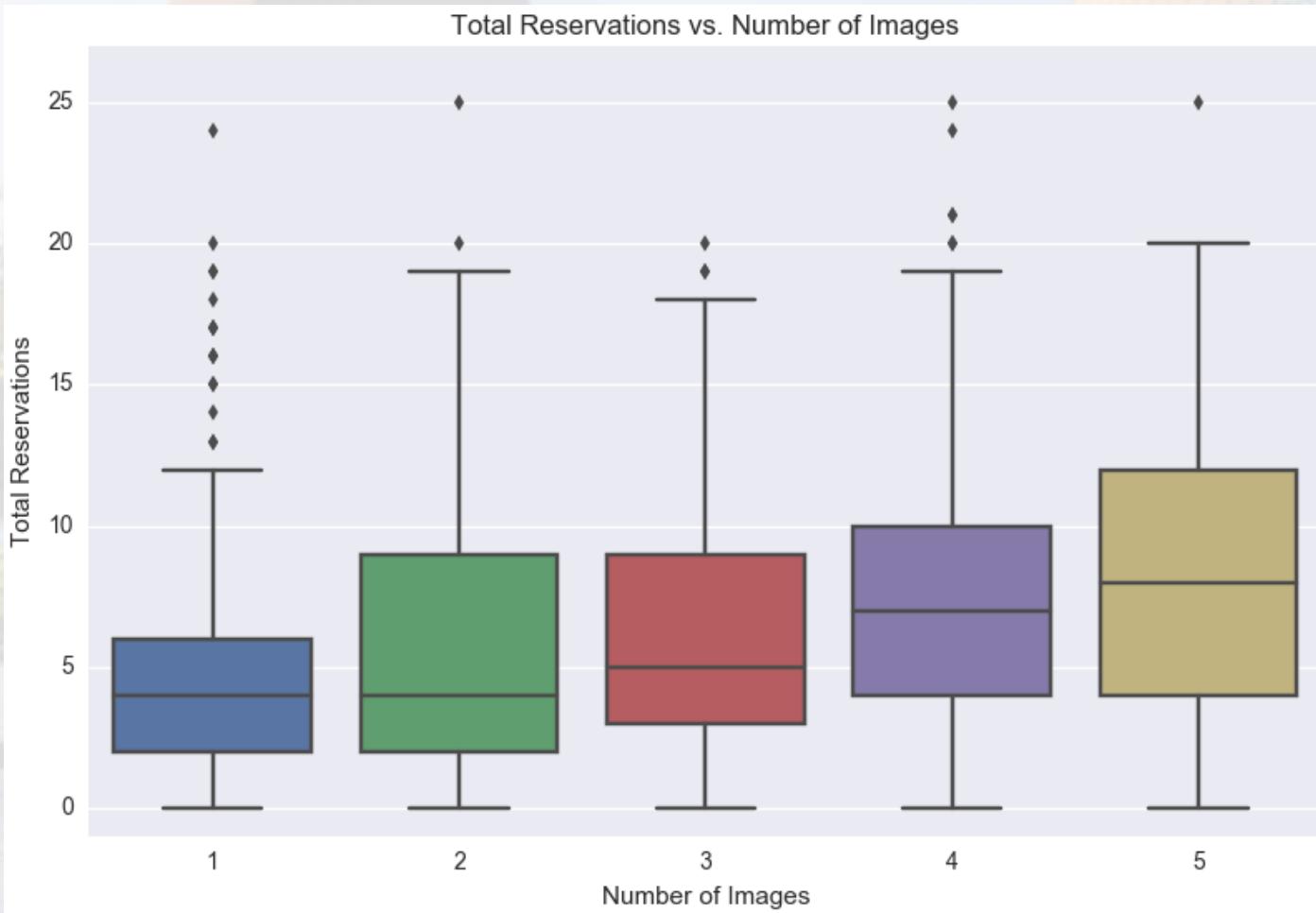
Engineered Feature

Vehicles

Engineered Feature

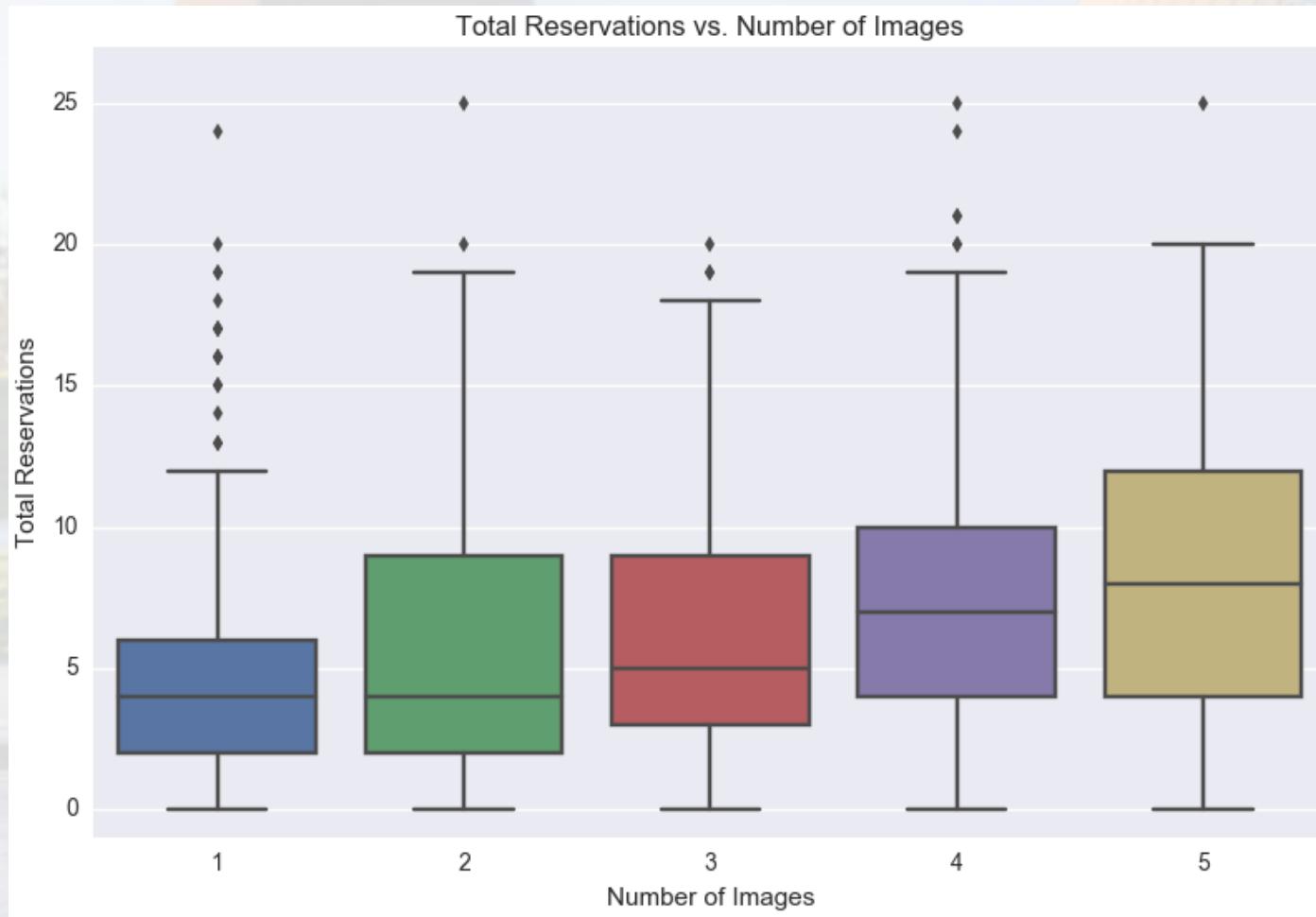
Price Difference: Actual price minus recommended price

Vehicles



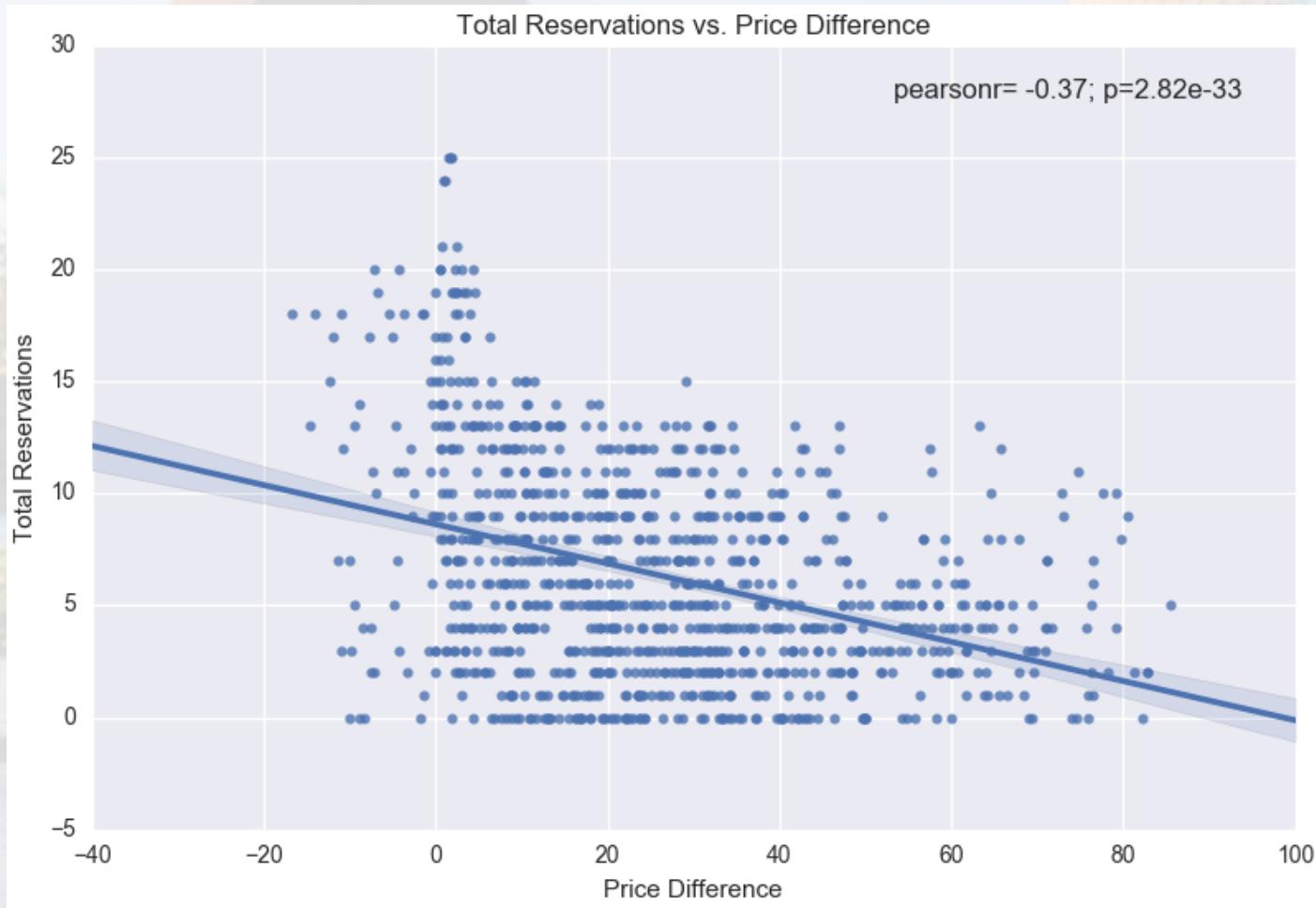
→ User postings with more images tend to have more reservations

Vehicles



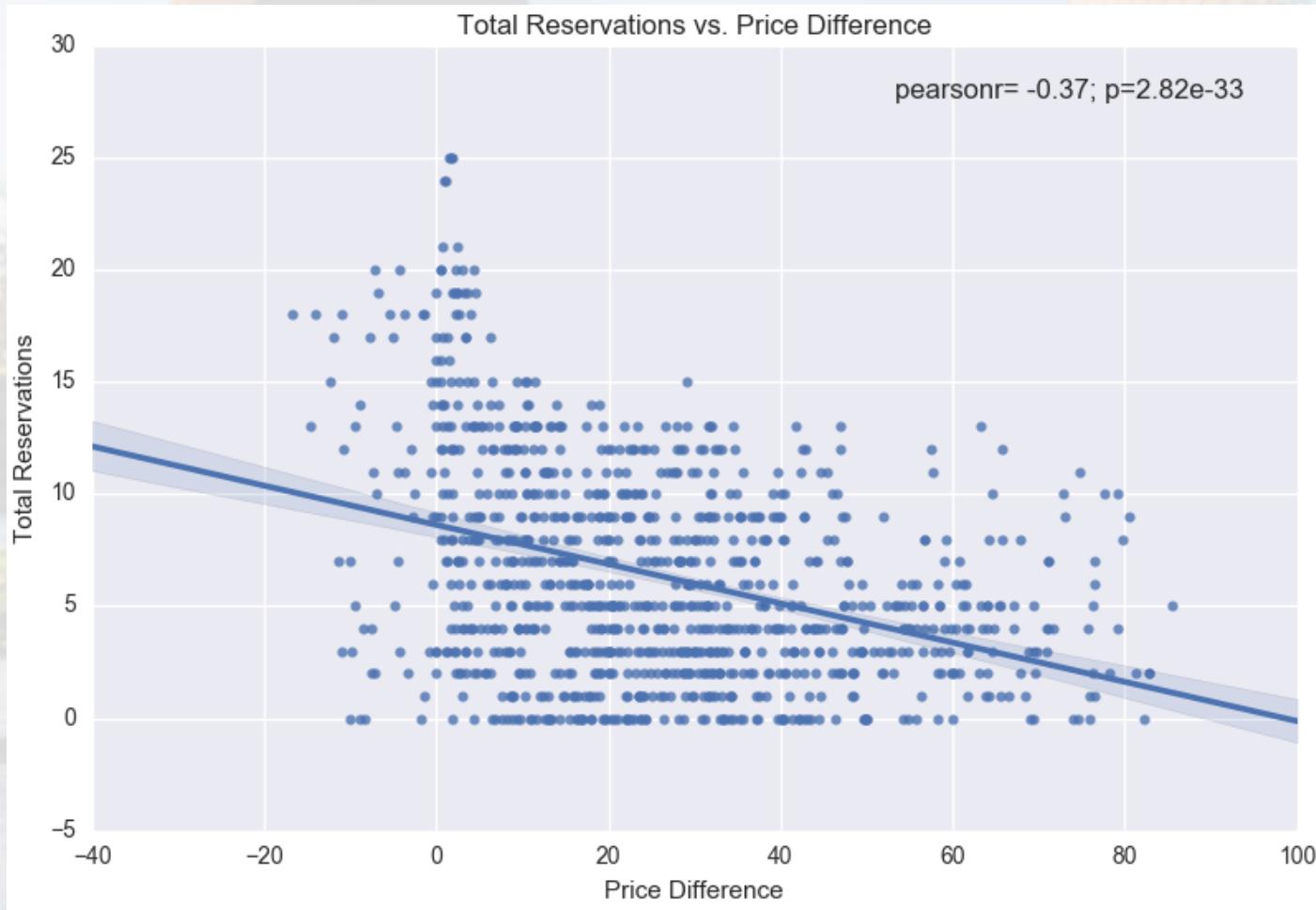
- >User postings with more images tend to have more reservations
- Encourage users to add more images to their postings

Vehicles



➡ Price difference negatively correlated with total reservations

Vehicles



- ➡ Price difference negatively correlated with total reservations
- ➡ Strongest correlation with reservations

Vehicles



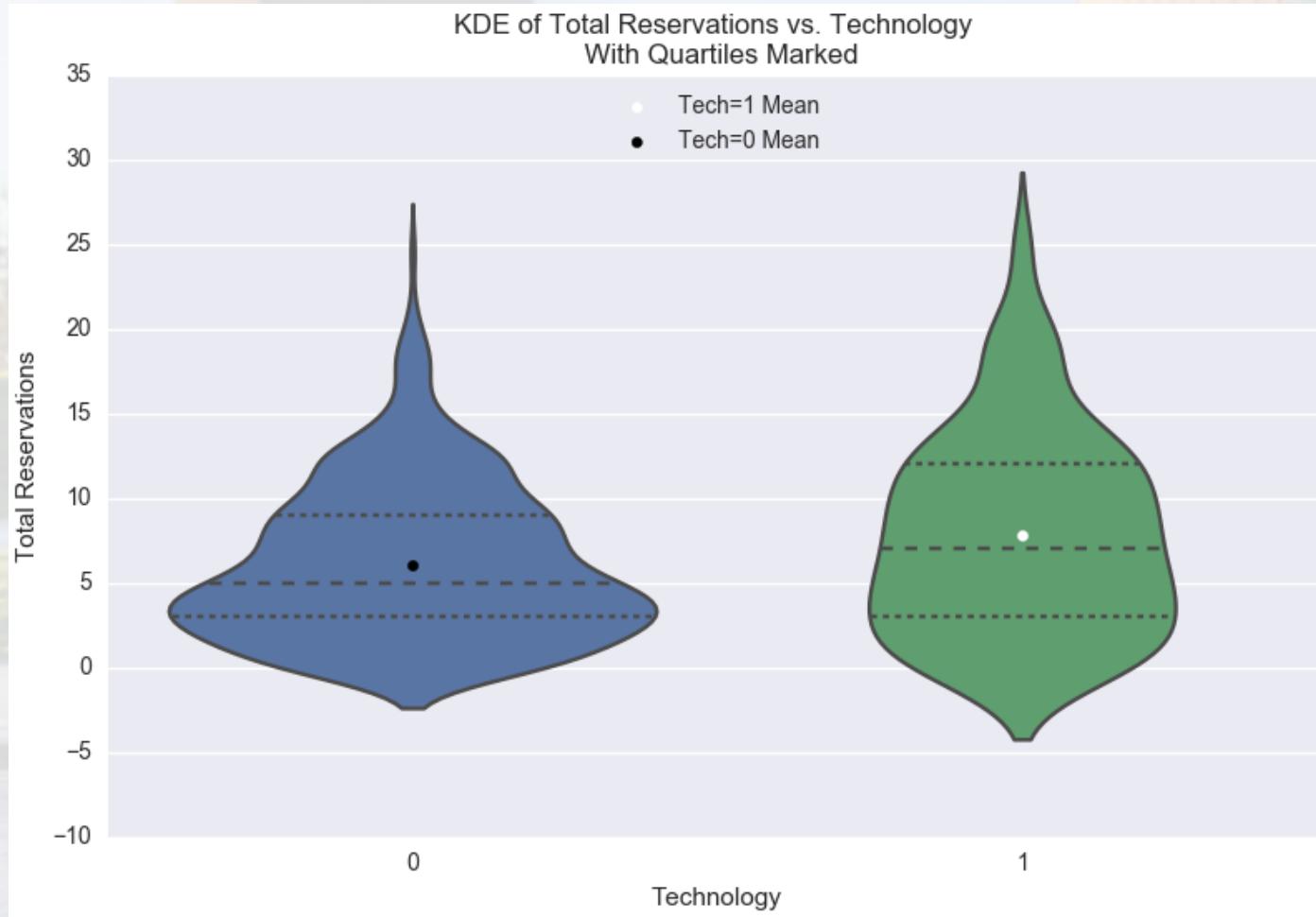
- ➡ Price difference negatively correlated with total reservations
- ➡ Strongest correlation with reservations
- ➡ Suggests most cars are “overpriced” according to our metric

Vehicles



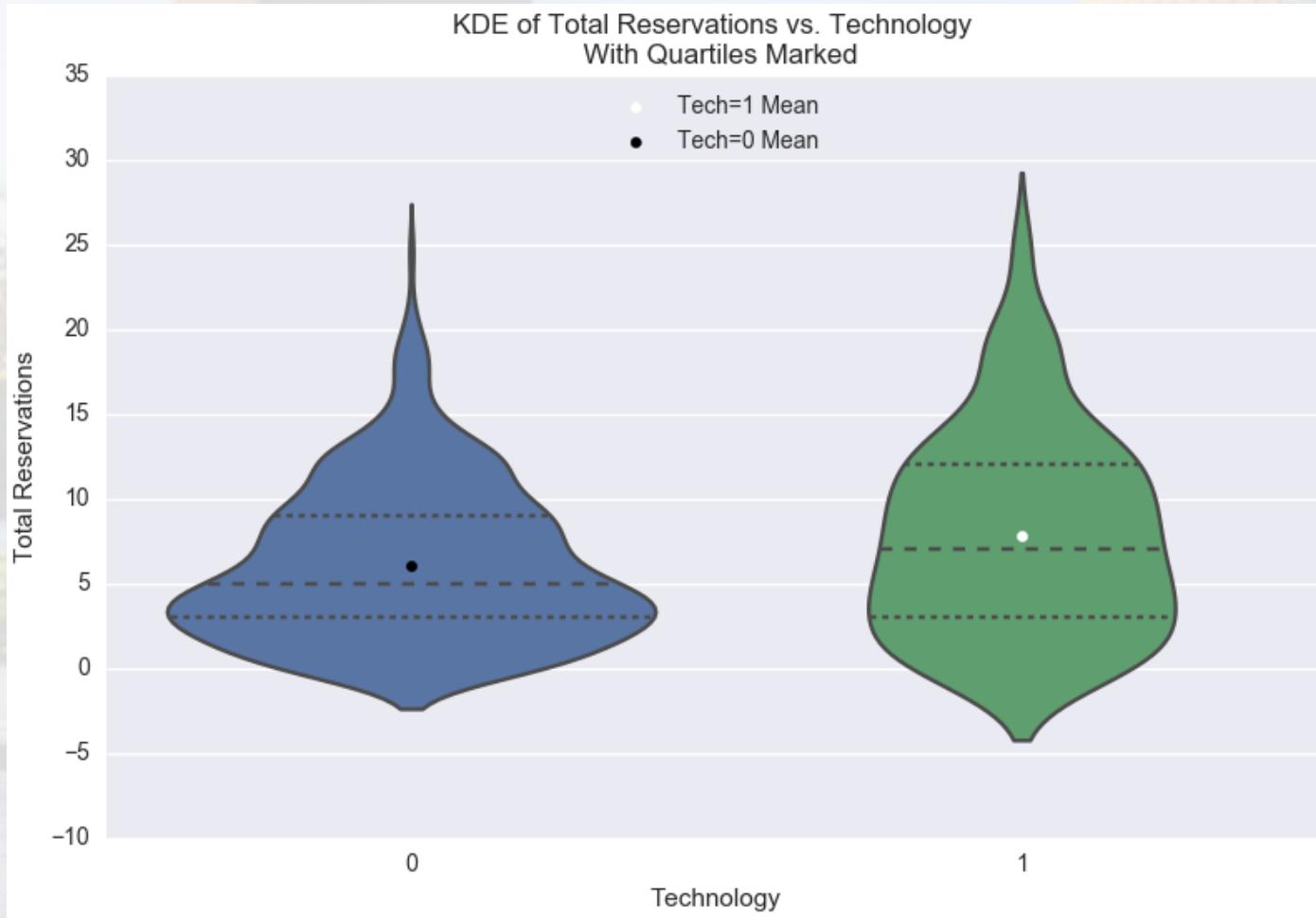
➡ No significant difference between whether vehicle is parked on street or not

Vehicles



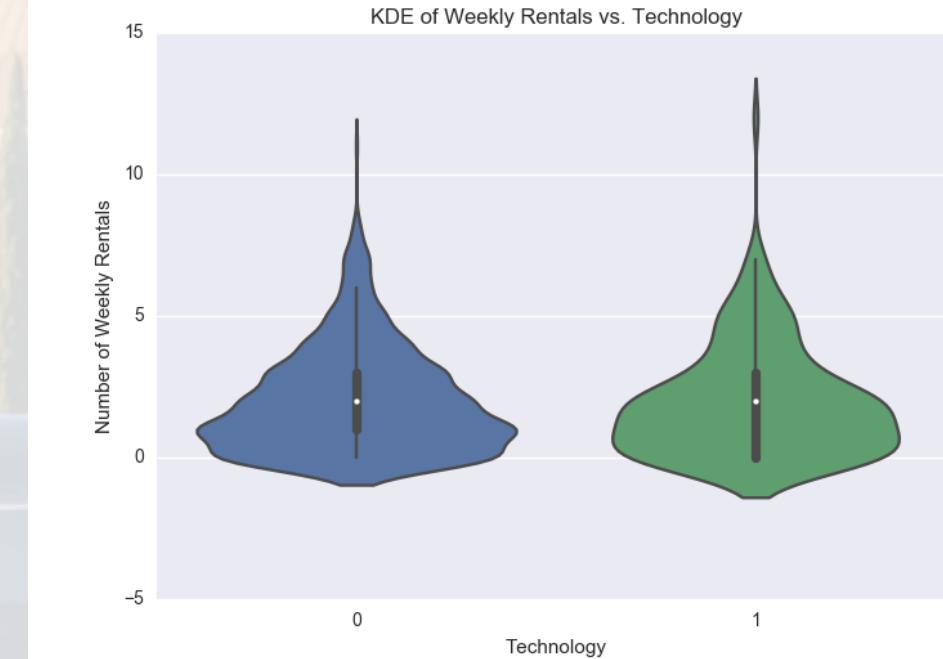
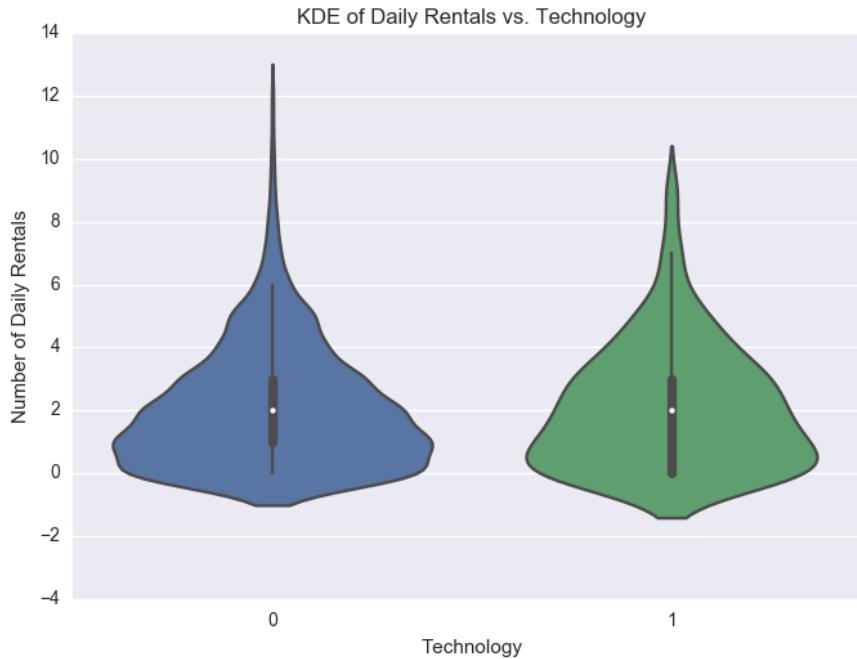
→ “Instantly bookable” vehicles have only slightly higher total reservations

Vehicles



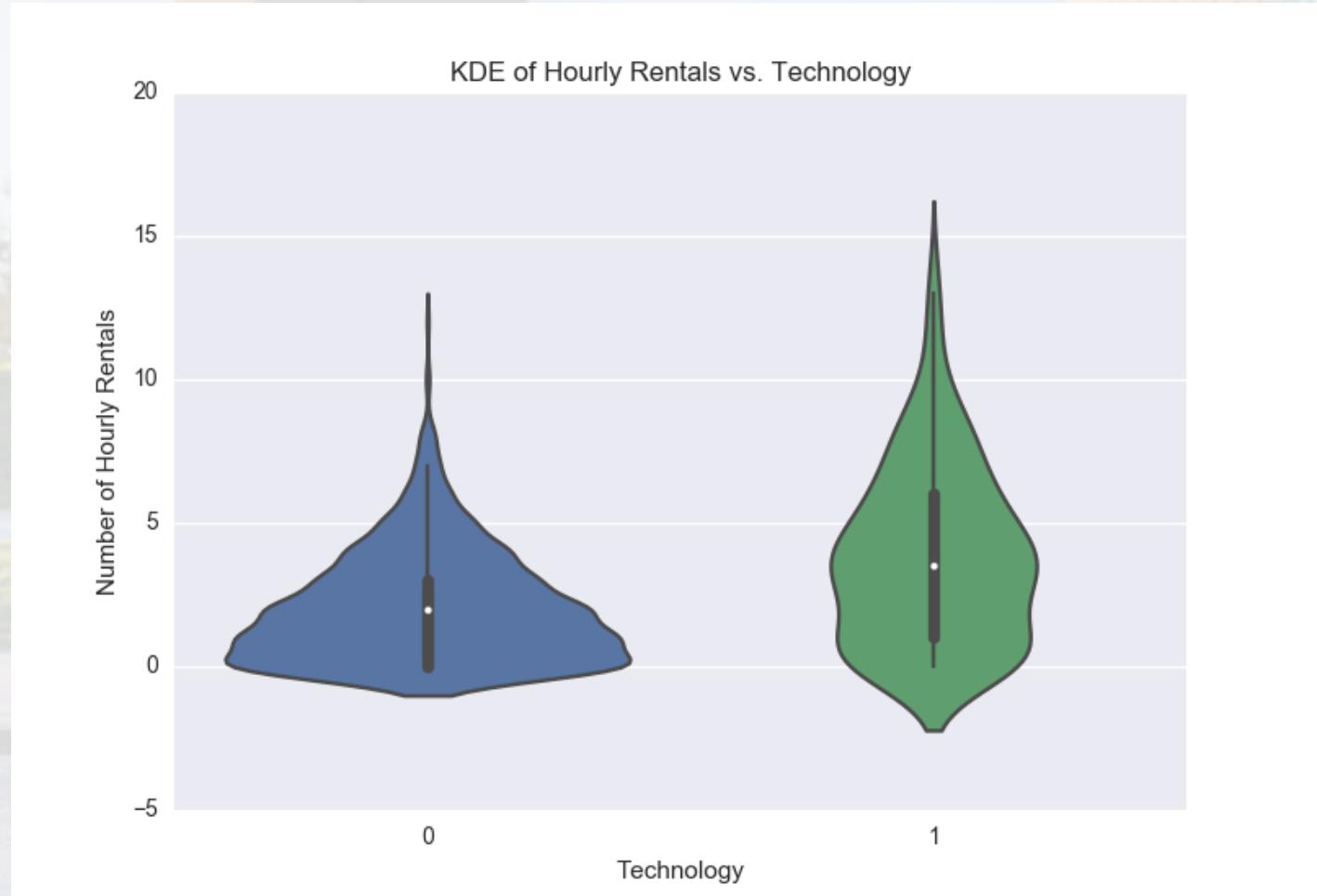
- “Instantly bookable” vehicles have only slightly higher total reservations
- Not strong relationship with total number of reservations

Vehicles



“Instantly bookable” technology doesn’t significantly affect daily or weekly rentals

Vehicles



→ Technology has slight effect on hourly rentals

Conclusions

- ➡ Number of images and price difference most important features driving reservations

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- ➡ Low average number of reservations for vehicles

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- ➡ Number of images and price difference most important features driving reservations
- ➡ Technology only slightly affects total reservations, specifically hourly rentals
- ➡ Low average number of reservations for vehicles
- ➡ Most cars are rented at price above recommended value

Next Steps

- ➡ Build models to predict total reservations

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- ➡ Build models to predict total reservations
- ➡ Create suggestion guide for users to maximize vehicle rentals
- ➡ Re-evaluate price recommendation model
- ➡ Further investigate how to increase overall average total reservations

Thank you!



jarrod.k.valentine@gmail.com



github.com/jkvalentine



linkedin.com/in/jarrod-valentine

TURO