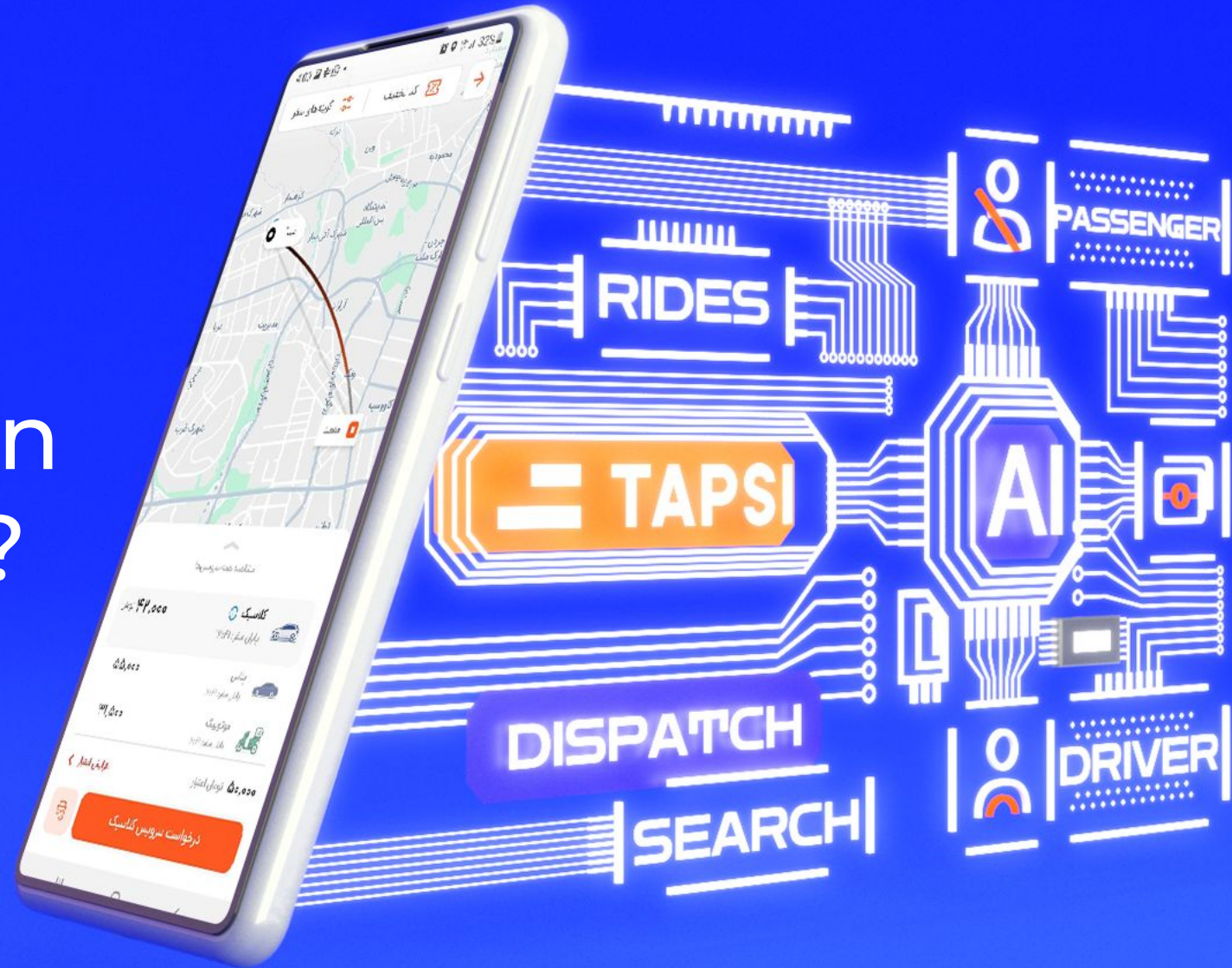


Tapsi Rides:

What does happen behind the scene?





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- Reducing transaction cost over generations of markets



- In shared economy businesses, customers can switch between alternative platforms with minimum cost
 - Correct design \Rightarrow Fast growth
 - Incorrect design \Rightarrow Users leave your platform

Pricing



Dispatching



Map



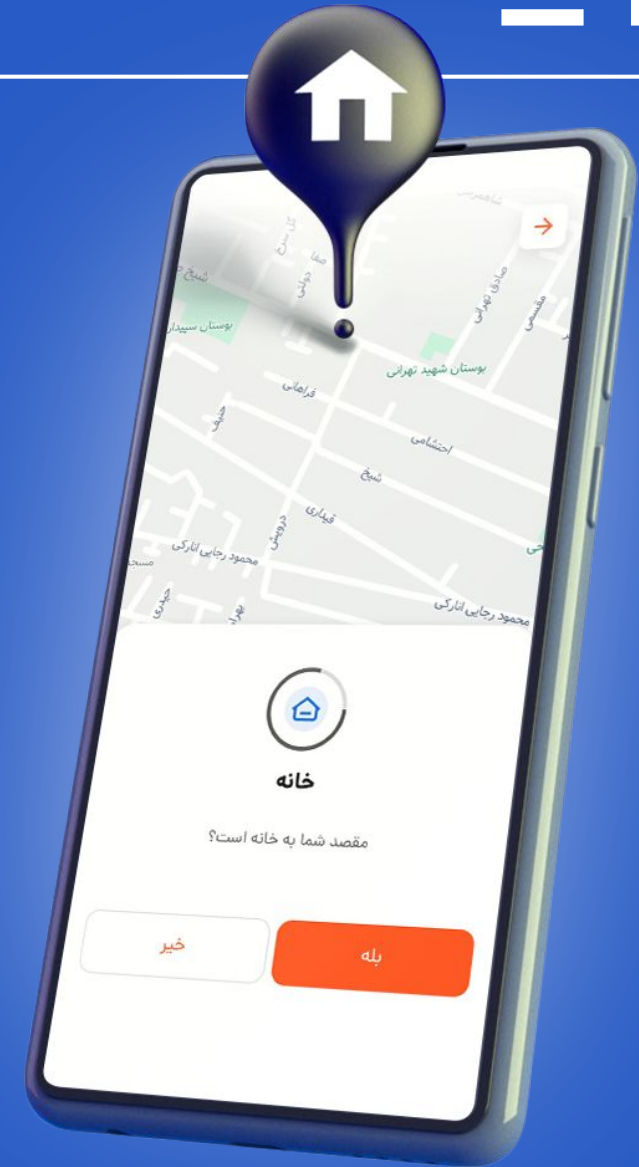
Incentive





Setting up a Ride: Smart Suggestions

- 83% of the time, a ride to the same destination has happened in the past.
- Precision/Recall tradeoff



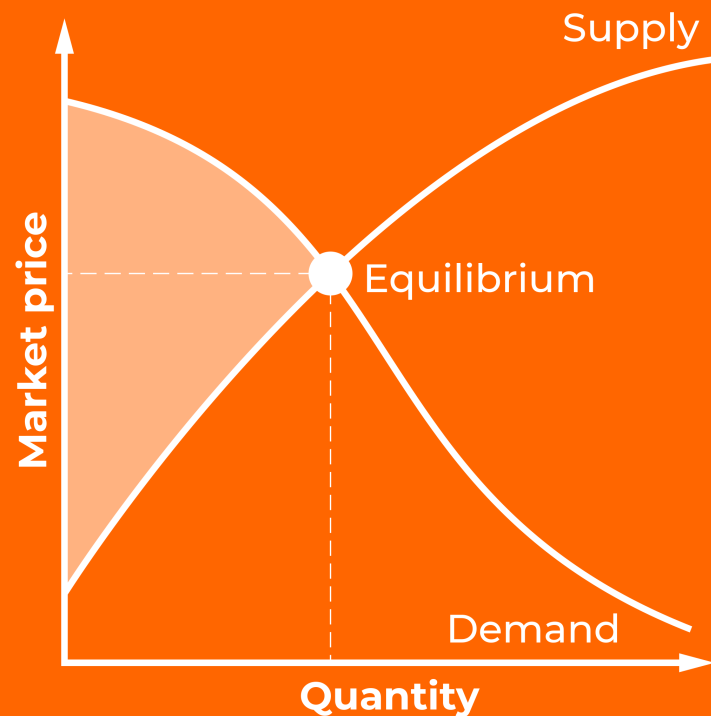
Setting up a Ride: Search

- Developing Persian NLP tools
- There is no unified structure for geographical addressing

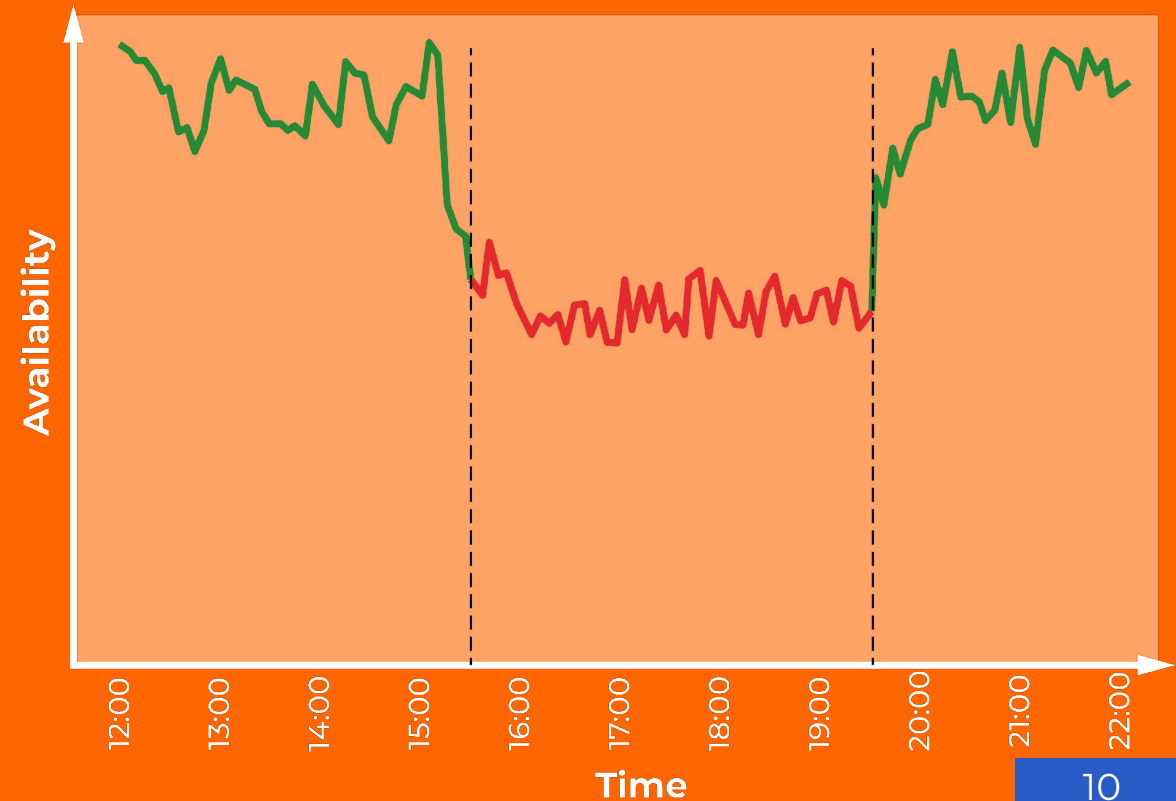




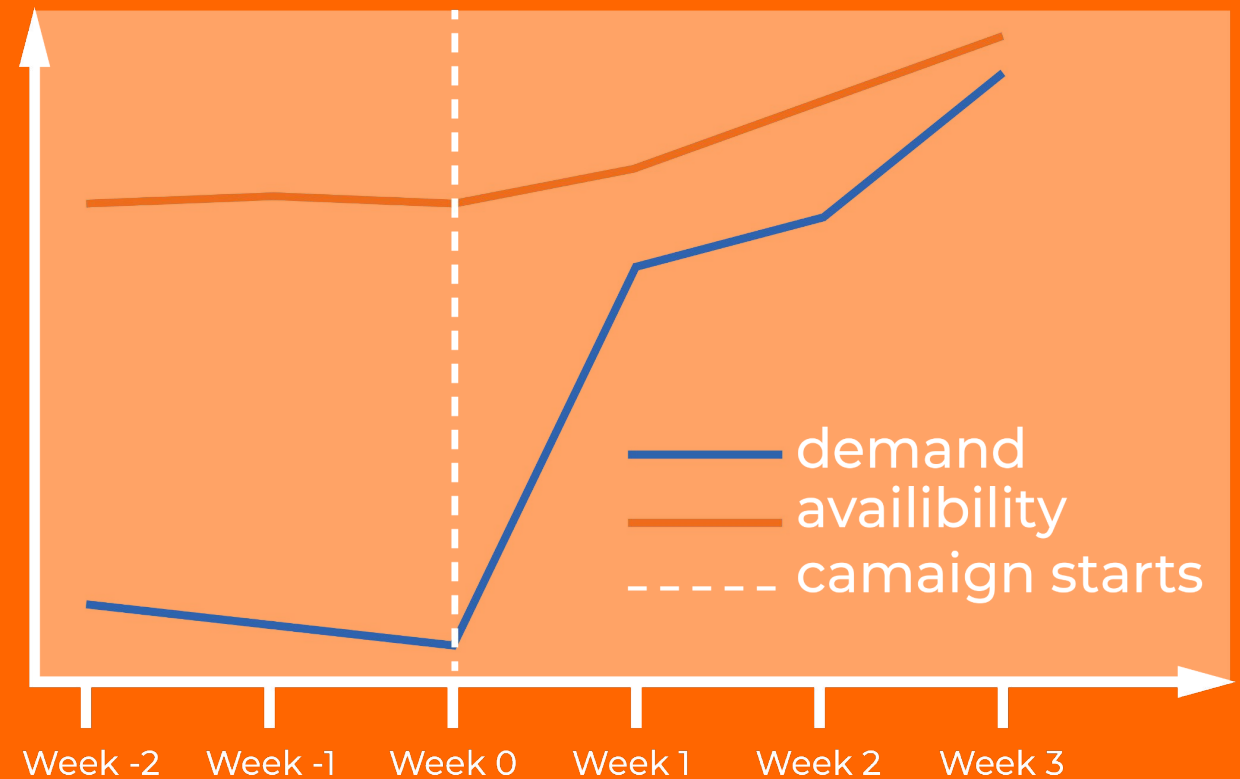
- Surge pricing: Tool for finding supply and demand equilibrium



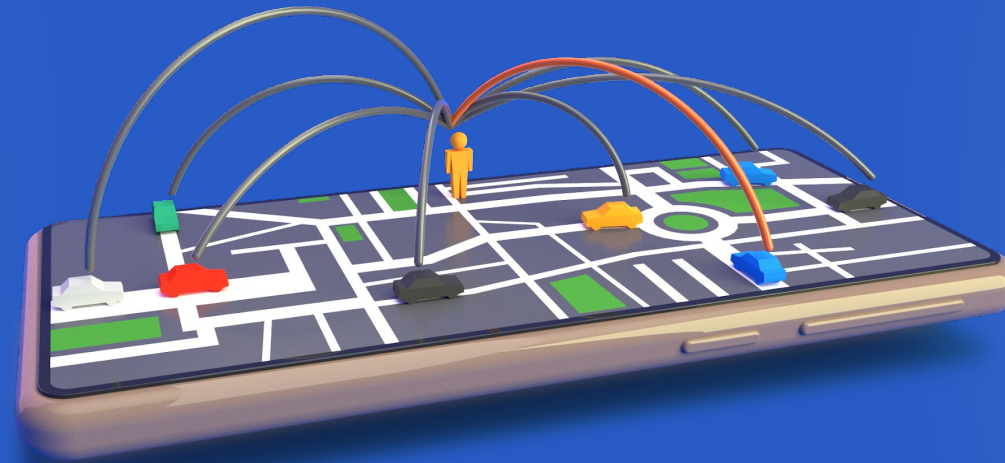
- A use case when surge pricing is down



- Discount is a strong tool for generating demand
- Increasing demand leads to increasing availability!



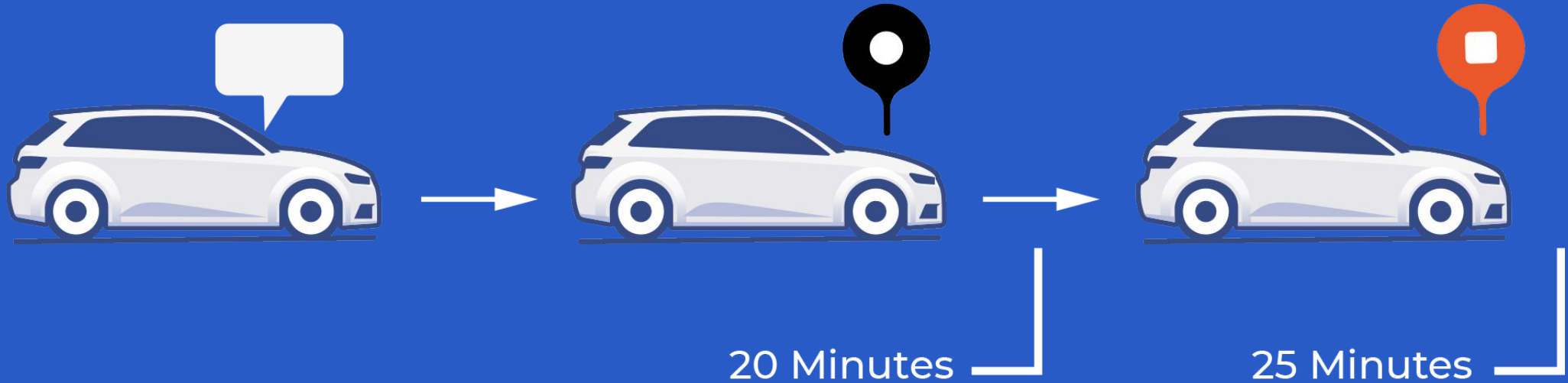
Metric: Driver Utilization



Waiting time to
accept a proposal

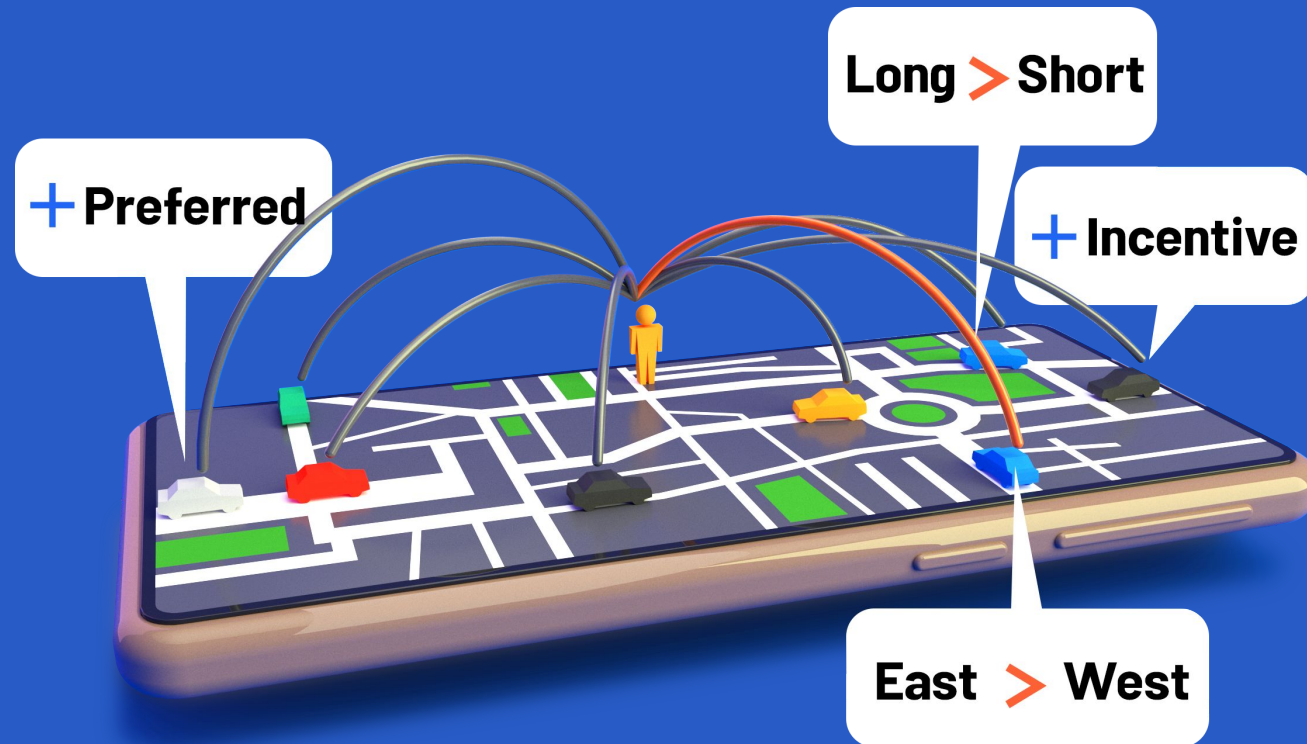
Time to get to the
passenger

Time to get to the
destination



45 Minutes

- We have limited time opportunity to find a qualified driver for the passenger
- Drivers have option to accept or reject each proposal
- There are multiple segments of drivers with different preferences
- Passengers' and drivers' priority may not be aligned



2.5 min Reduction \Rightarrow 10% More Income for Drivers

Price

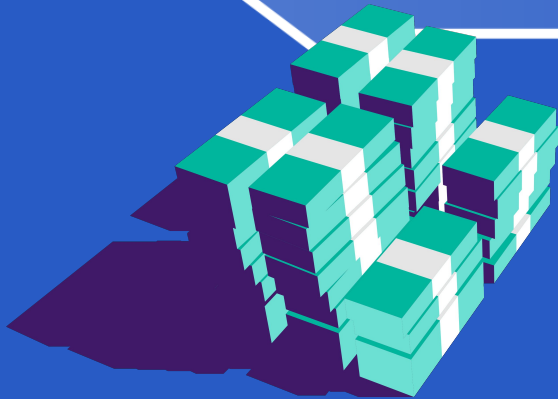
Dispatch

Finished
ride

Driver
acceptance

Pickup
time

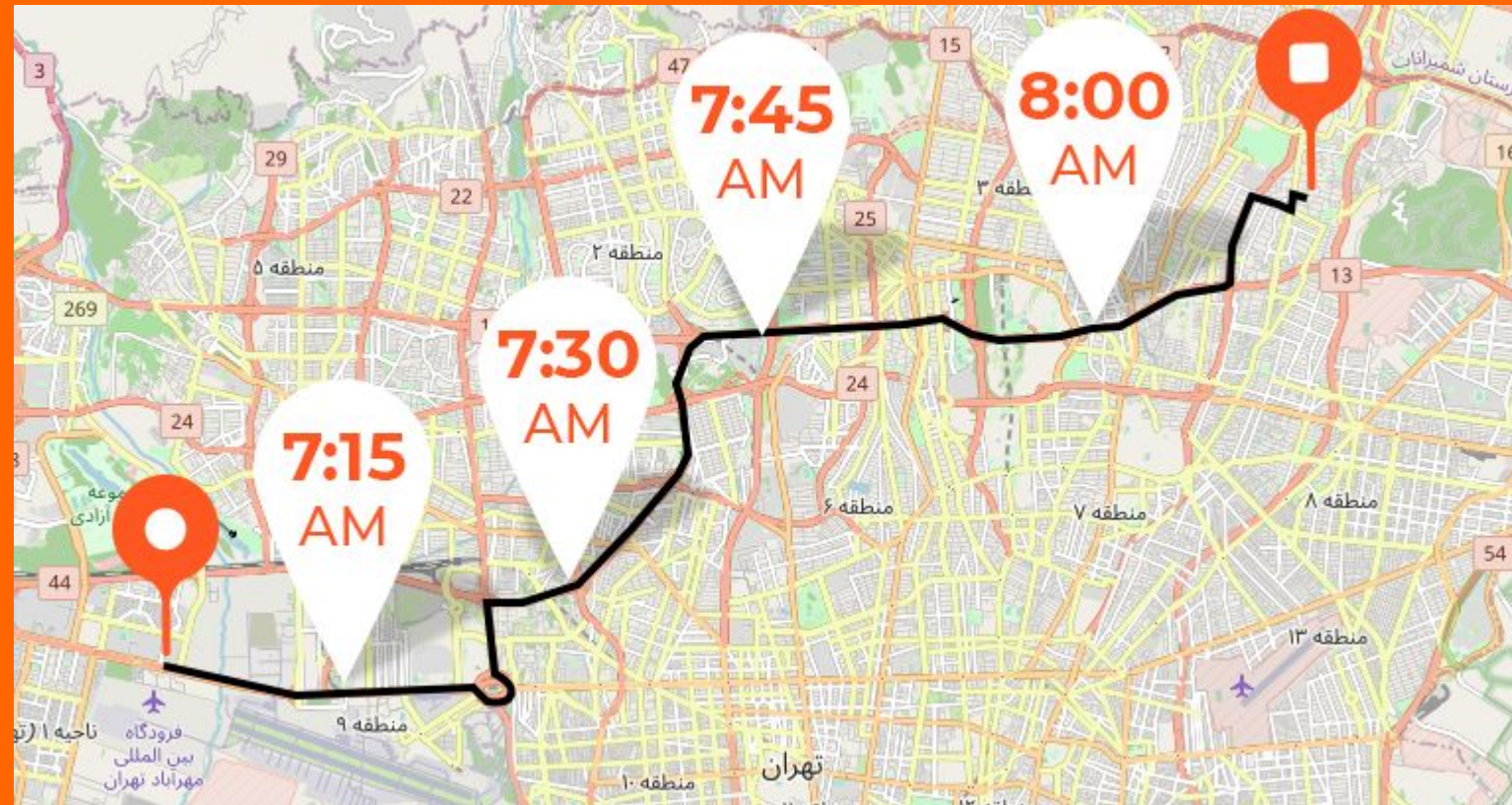
Driver
finding
time



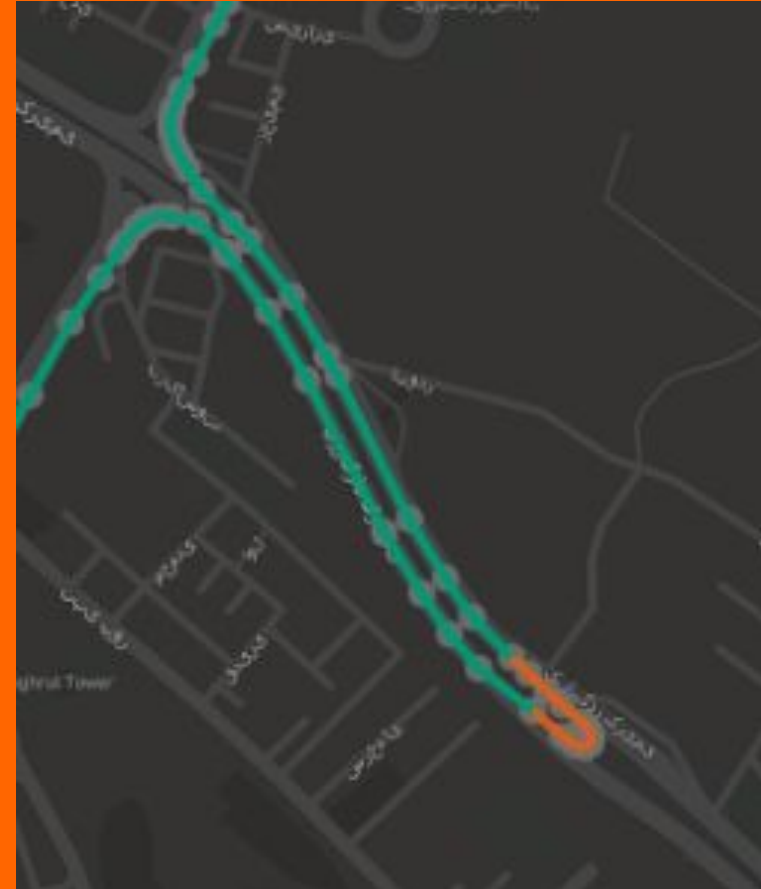
- ETA plays a critical role in the marketplace design
 - Pricing: Ride ETA is the most defining factor in fair-pricing
 - Dispatch: Passengers' and drivers' satisfaction is heavily dependent on pickup ETA



- There are more than 100M ETA calls per day in Tapsi
- Time-series forecasting is a challenge in routing

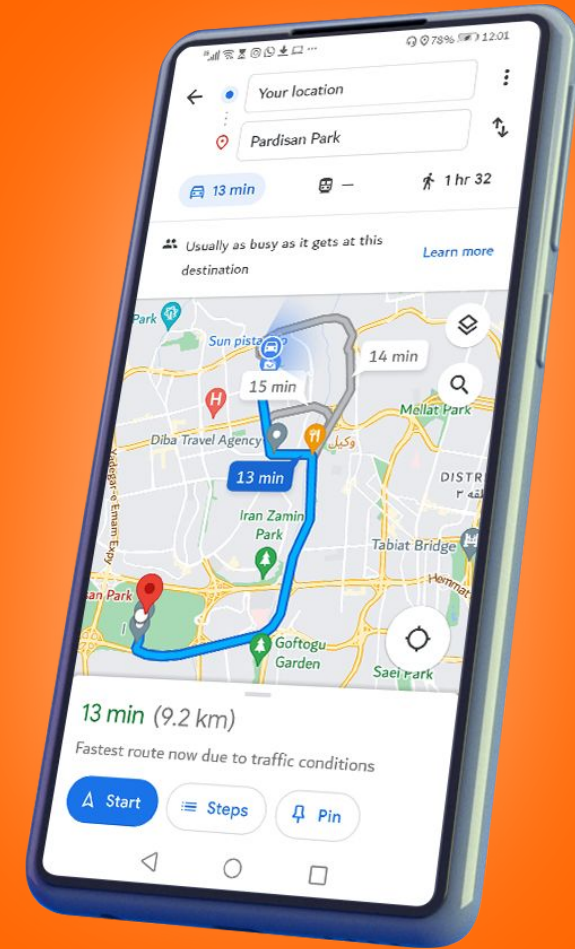


- Basemap errors affects the ETA accuracy
- The basemap is changing regularly
- The basemap changes may be temporary



ETA: Why not to Outsource?

- Main reasons to develop in-house ETA service:
 - Availability
 - Cost
 - Accuracy
- Tapsi's ETA accuracy is more than 10% better than alternative solutions



1% Improvement \Rightarrow Hundreds of Million Tomans More Income for Drivers

