# Mobility Management in Mega Cities using Shared Mobility Options



#### **About Ola**

#### Mobility for a billion Indians

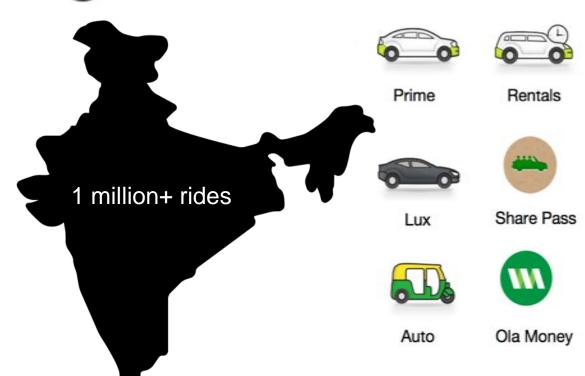


- Founded in Jan 2011
- India's most popular transportation app
- Presence in 110+ cities
- Over 800k vehicles + 900k driver partners
- Average 3 min ETAs across the country
- 6000+ employees
- Used by over a million customers everyday!





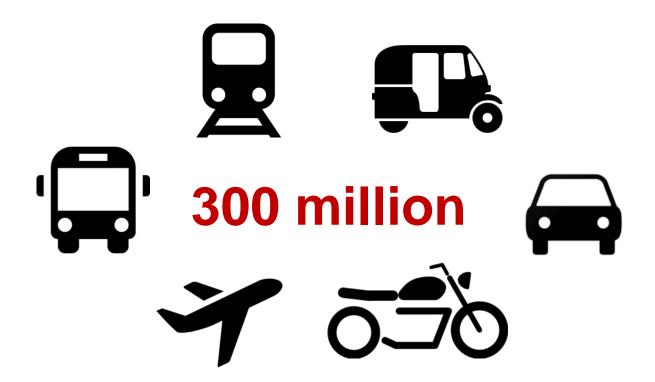




Diversity of transport options at scale



#### Mobility ecosystem in India





#### Share and Public Transport are **NECESSARY**

#### Number of Cars per 1000 people



United States of America



People's Republic of China



India



#### Rethinking Mobility: An URGENT need

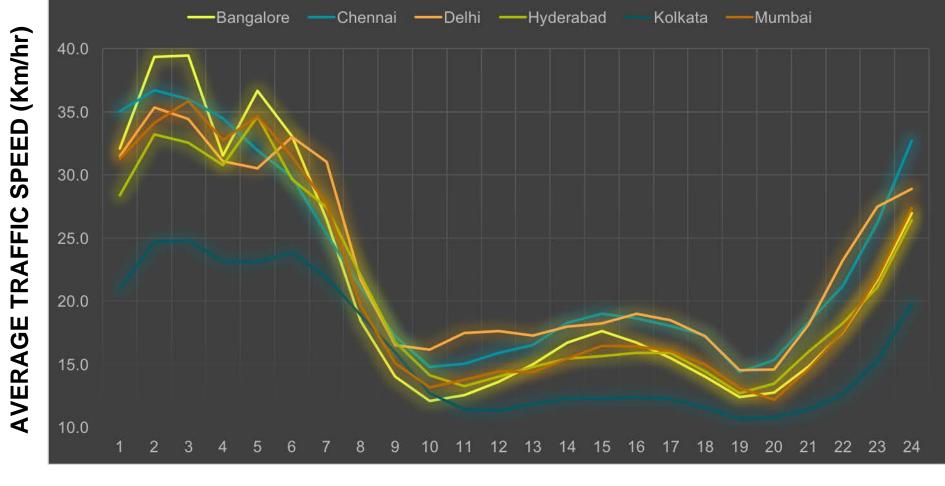


60 million minutes a day in traffic



10 of 20 most polluted cities in the world are in India.







#### Why Fleet Management is a Complex Problem?



- URL's don't disappear once retrieved!
- Cabs disappear once allocated!



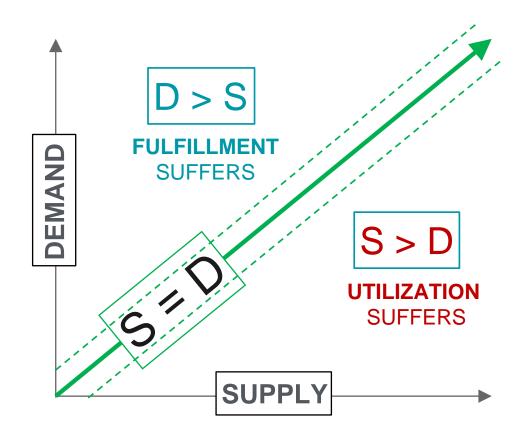
- Products don't rate/deny a customer
- Drivers do rate/can cancel a customer request



- Doctors don't change location after each appointment
- Cabs appear at different location/time after each ride!

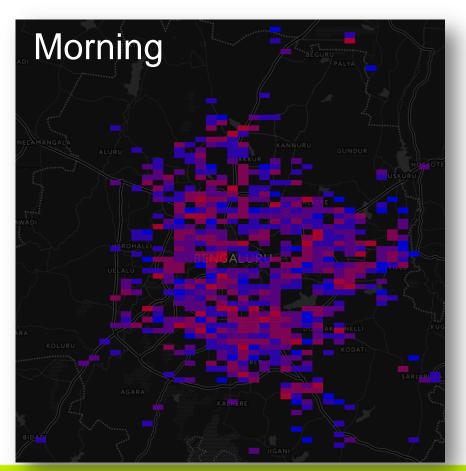


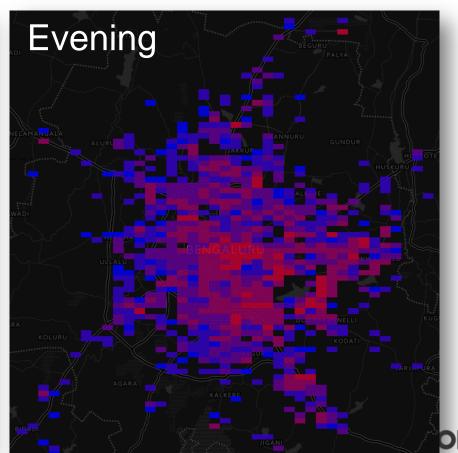
## Mobility in a Nut-Shell



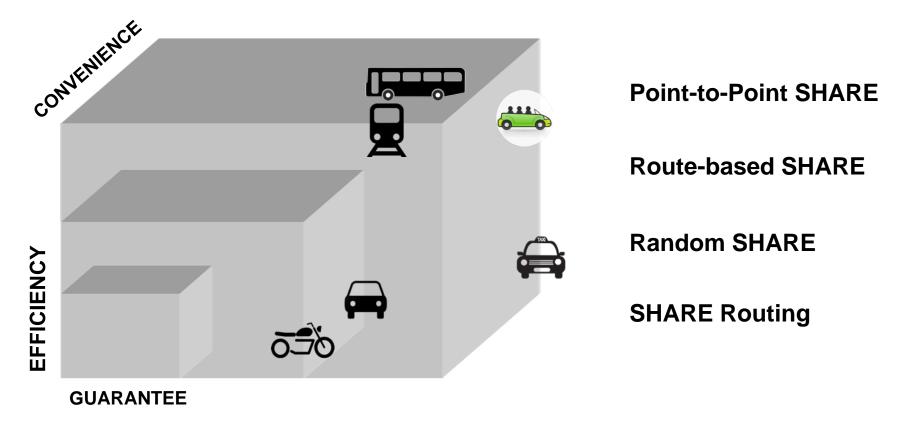


#### **Dynamic Nature of Demand Patterns**





#### The Anatomy of Ground Mobility





#### Point-to-Point Share: Cities are becoming Clustered



Clustered **HOMES** 

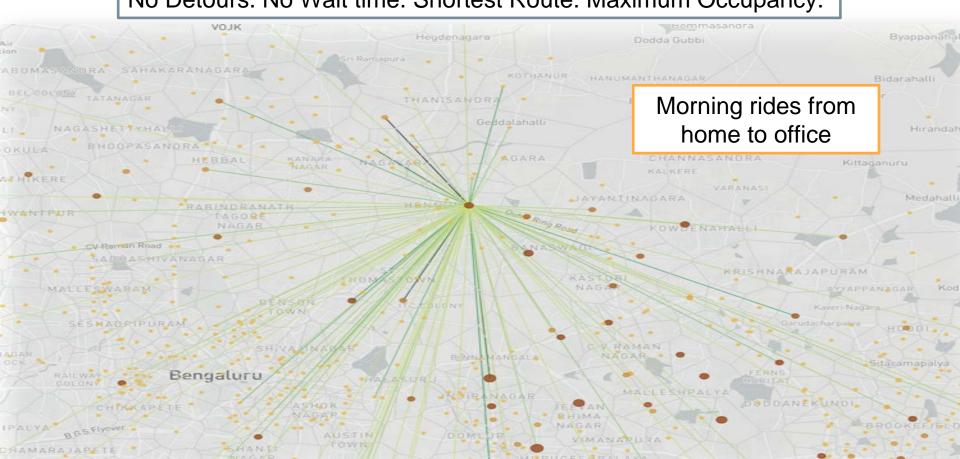


Clustered WORK



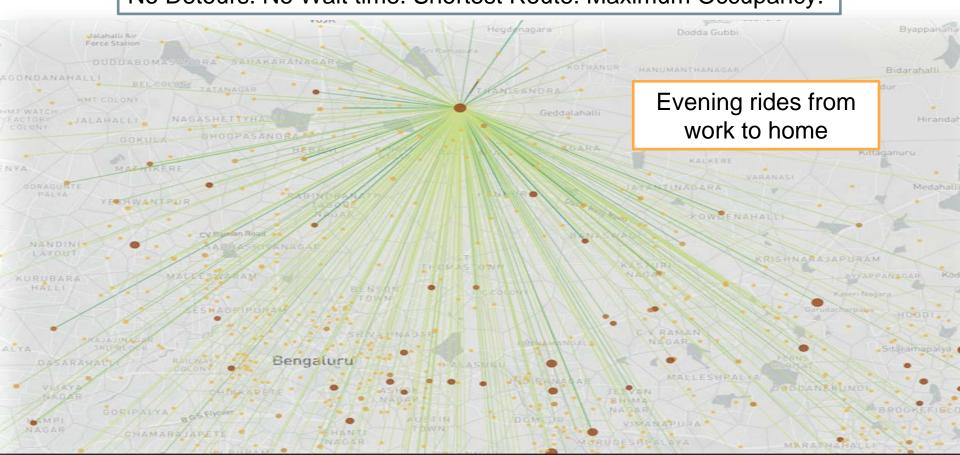
#### (1) Point-to-Point Shares

No Detours. No Wait time. Shortest Route. Maximum Occupancy.



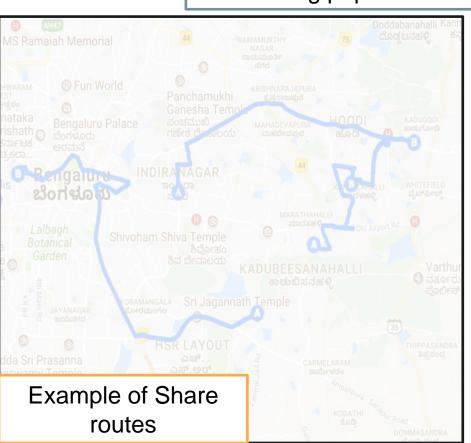
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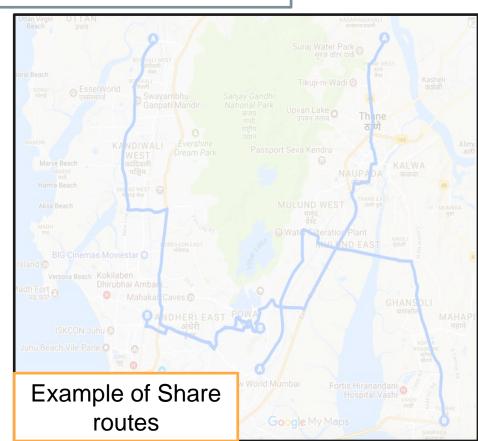
No Detours. No Wait time. Shortest Route. Maximum Occupancy.



#### (2) Route Based Shares

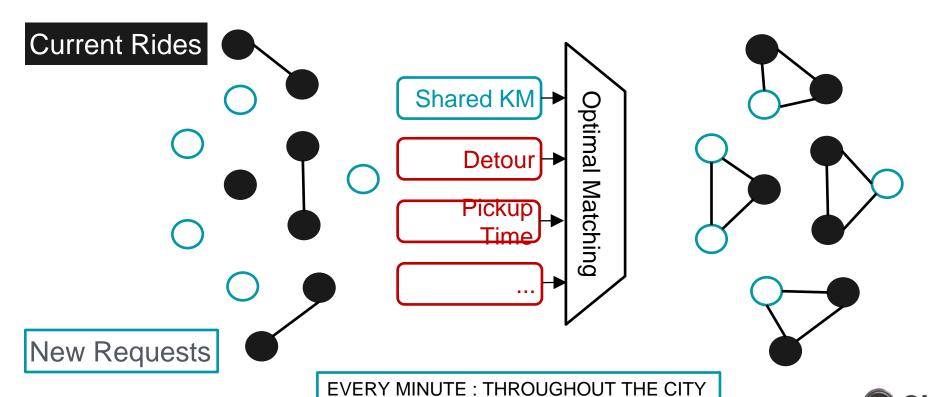
Discovering popular routes from data of Shared cabs





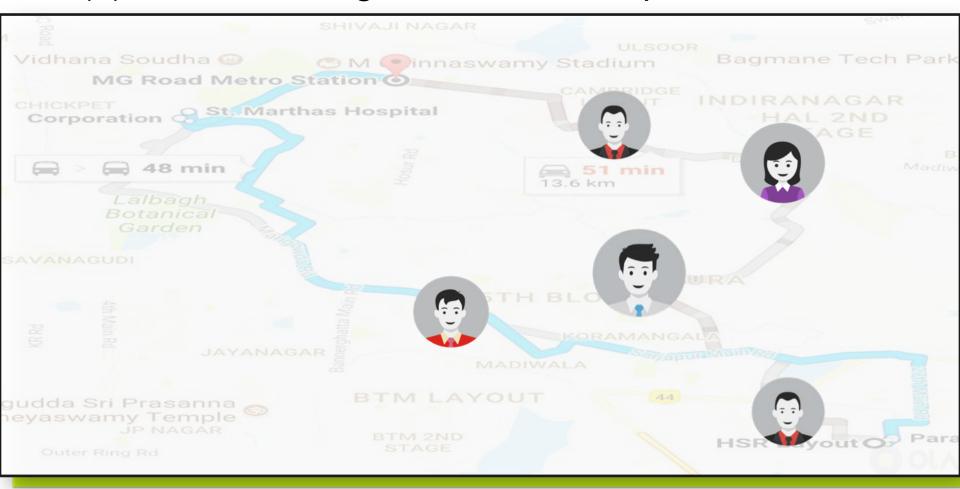
## (3) Asynchronous Shares

Large Scale. Real-Time. Multi-objective Optimization Problem.





# (4) Share Routing: Maximize Compatible Demand



### Share Impact so far... and counting...

# 12 Million Kg

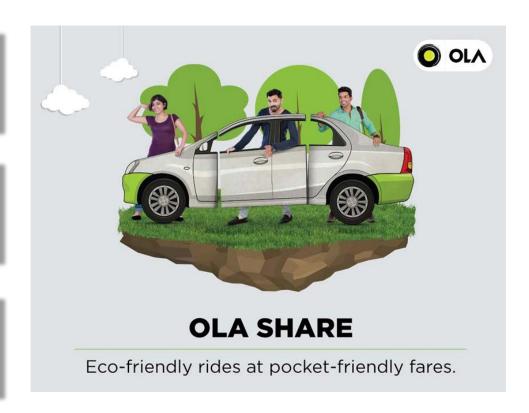
Reduced in CO2 emissions

7 Million Liters

Fuel saved

84 Million Kms

Reduced Cab Traffic





#### A vision for the Future



#### **OPTIMIZE SHARE**

Maximize occupancy, reduce no. of cars on road.

#### **CONNECTED CARS**

Maximize value of each ride and Fleet









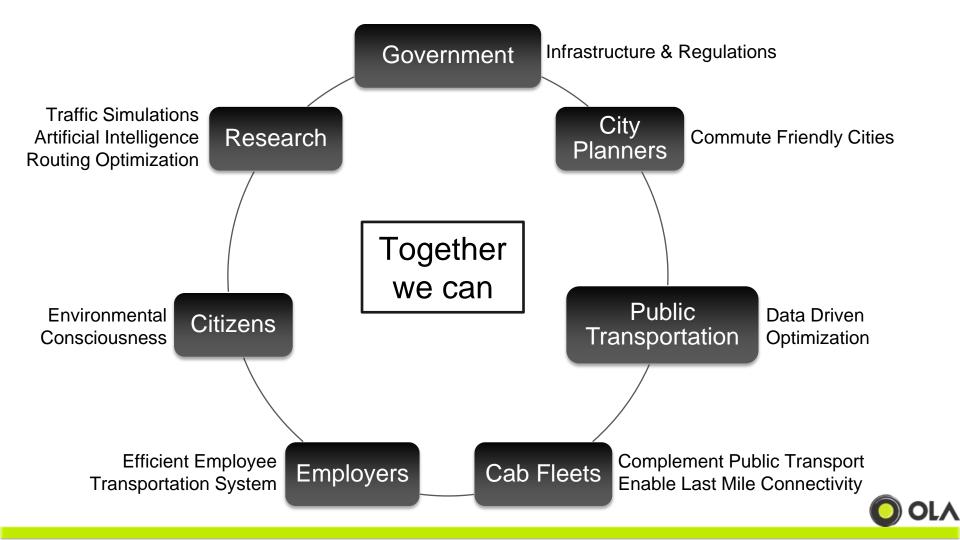


One place to plan each ride to balance convenience with efficiency











### **THANK YOU!**