Commute Wiser

Plan and Pay with your Phone

Know, Catch and Verify in Real-time

PUBLIC MINIBUS ROUTES IN ISTANBUL

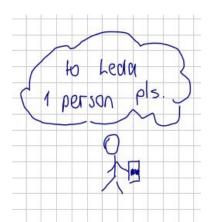
GALAXIA ISE

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PROBLEM 1



Transportation payments for public minibuses in istanbul is time consuming, under utilized and requires technological improvements.



Minibus commuters and operators in istanbul struggle with ease of payments; majority of minibus routes accepts payments only on the bus and with cash. On some routes (< 2) it is possible to pay with istanbul card or bank card.



Although this seems to be a solution in fact it does not solve the fact that for each payment the commuter has to say the destination and the driver adjusts the fare then the contactless payment can be finalized.

PROBLEM 2

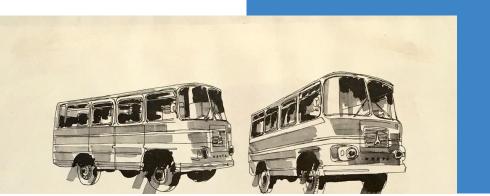
 Real time information about minibus arrival time and availability info (for the commuters)

Uncertainties in

Practice

Waiting Commuter Info (for bus drivers)

Route planning (for commuters)



A Mobile beforehand ticketing application with real-time info, featuring digital verification on the bus with your phone or city card, for Minibuses in istanbul public transportation.









PROBLEM 3

Utilize algorithms

and commuters

data to improve

efficiency and

reliability.

• Minibuses operates on fixed routes with fixed schedules however in practice they operate similar to on demand units this opens the way for optimized scheduling algorithms.

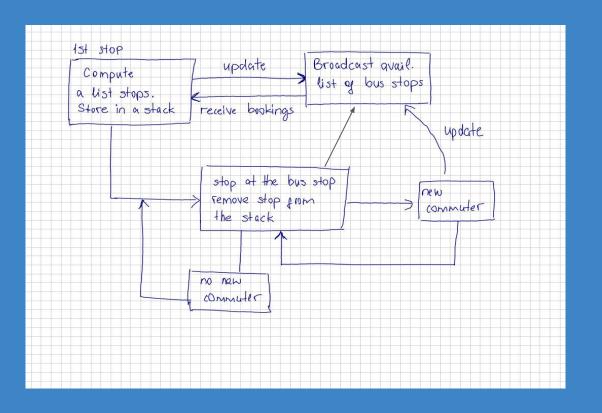
 Automatic calculation of hop off bus stops and availability for hop on commuters; increased usability and security, improved process for the drivers.

Commuter Data impacts the connected transportation units.

SOLUTION

Real Time Info For

Drivers



SOLUTION

(For Governors)

Algorithms and

Data Analysis

Heuristic algorithms to improve efficiency of scheduling,

Utilize commuting data to optimize mobility and reliability,

Secure and privacy friendly process within the data regulations.

The Solution

Mobile payment and verification, real-time tracking, demand-driven scheduling

| Smooth Integration | Digital and Private | Algorithms and Data Analysis | |
|--|--|---|--|
| Real time tracking and availability-info. | Payments and verification with mobile phone. | Heuristic algorithms to improve efficiency of scheduling, | |
| Uptodate minibus transport routes and schedules. | Verification with city card. Refill city card. | Utilize commuting data to optimize mobility. | |
| Information about connected transport units. | Secure and privacy friendly process within the data regulations. | | |
| Utilizing third party applications. | | | |

Revenue Models

| Subscription | Search/Ads | Big Data | Licensing |
|--|---|---|---|
| Payments and verification with Mobile phone, Unlimited use; reserve + info + pay; yearly, monthly, daily subscription fee. More usage free credits. One-time use: booking and payment; negligible fee for each use. | Real time tracking of the minibus, Real time availability info, Waiting customer info for bus drivers. Minibus routes. Local minibus transport advices. Info connected units. | Privacy preserving Big Data analysis for B2B customers. | Mobile App license to produce your own App. |

^{≅ 1} million customers, ≅ \$3 million revenue per year from subs fees, search/ads

MARKET for Minibus in public transport in Türkiye

B2C & B2B

(Daily
commuters in
istanbul ≅
3 million
)

Minibuses in populated towns; Antalya, İzmir, Ankara

> 1000 minibuses

Minibuses used for public transport in all towns:

> 10.000 minibuses (2018)

Initial buyer persona

Regular Commuter



Works for a middle sized company, uses connected transport units, utilizes mobile phone effectively, Often tired and stressed of long hours commuting.

Any purpose, hop on-off commuters



Students, part-time workers, housewives, retired, tourists, weekend commuters,

Utilizes mobile phone effectively,

Prefers digital payments, instant bookings for reliable and smooth commuting.

Operators



- Improve efficiency,
- Ease of payments and verification,
- Increase in profits.

Go-to-Market

8 months

Mobile App with full features:

Payments and Verification with Mobile Phone

4 months Surveys MVP Twitter, Linkedin, Interviews. Web Page

6 months

Develop an App with features: real time tracking, availability info, waiting customer info, minibus routes, info connected units,

- Collect initial sign ups,
- # Downloads,
- Revenue from Ads.

Revenue from subscriptions:

In 18 months.

Other cities

Competition

| Others/Minibus | Istanbulkart Mobil | IETT Nasil Giderim | Otobusum Nerde | Moovit | CityMapper | CommuteWiser |
|------------------------|-----------------------|-----------------------|-------------------|-------------------|------------|-------------------|
| Routes Info | 0 0 | 11 | ? | / / | 11 | 11 |
| How to Go | 0 0 | 11 | ? | 11 | 11 | 11 |
| Real Time Tracking | 0 0 | 0 0 | 1 | ? | ? | 11 |
| istanbulKart Refill | ✓ 0 | 0 0 | 0 0 | 0 0 | 0 0 | 11 |
| QR code Payments | ✓ 0 | 0 0 | 0 0 | 0 0 | 0 0 | 11 |
| | istanbul | istanbul | istanbul | Istanbul + others | istanbul | Istanbul + others |

Financials

ASK

\$XXXK for 18 Months

- Mobile Payment App Costs (Team Costs 3 or 4) %54
 - Develop
 - Maintain
 - Update
- Marketing Costs (ads, videos, surveys) %12.5
- Hardware costs (hosting, web services, hw for verification)
 %12.5
- Advisor, legal, company maintenance costs (HR, office etc)
 %21

The Team in Construction

```
Özgül Küçük
Founder, CEO, Developer.
PHD in Engineering, Applied Cryptographer.
Experience on research, project development, software, technology, algorithms.
Co-founder(CTO, Developer),
Developers,
Marketing Specialists,
Advisors.
```

Backup Slides

Problem

Commuters and Operators struggle with ease of payments:

- Time consuming,
- Not possible to pay or verify digitally on the bus or beforehand.

Uncertainties in practice:

- Which minibus goes to my destination?
- Are there available seats?
- When the bus will be at the bus stop?







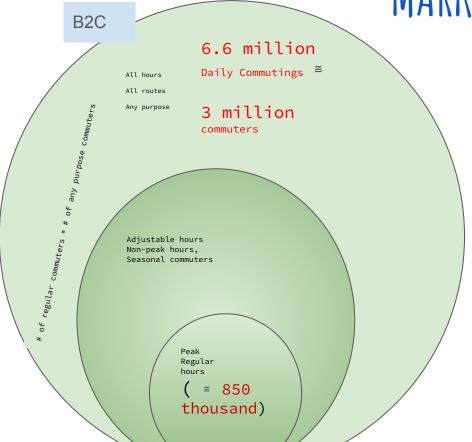




Problem

- What is the destination of commuters?
- There are available seats, are there any waiting commuters in the bus stops?
- Wait 10 minutes more in this stop?

MARKET FOR ISTANBUL



B₂B

- ≅ 6460 minibuses, on 450 routes
- Long routes diverge to short routes to inner neighbourhoods

Steps To Revenue

- More detailed and extensive customer surveys commuters and operators.
- Promote the solution and the company through landing pages and MVP.
- Develop Mobile App for Search And Ads. Revenue from ads.
- Promote a simulation of our beforehand ticketing and digital payment solution through our marketing channels.
- Launch a test on chosen routes, advertise.
- Product with full features in 12 months. Revenue from subs.
- Maintain, update, improve.
- Marketing Big Data and Licensing.
- Marketing for other cities.

INTERVIEW OUTREACH PLAN

- Disseminate a new survey and the landing page on social media; twitter, instagram, facebook, Linkedin.
- Survey on chosen minibus routes.
- Get in touch with Minibus operators, promote the mobile app with an MVP.
- Promote the MVP in social media.

FORECASTING ISTANBUL PUBLIC TRANSPORTATION

(4 WHEELS 74% \square 49% by 2040)

Transportation % by 2040 (Population 16 million to 18.8 million)

- Rail System 24% / 47%
- City Buses 42% ≥ 25%
- Metrobus 10% → 7%
- Minibus 22% ≥ 17%
- Ferry 2% / 4%



#Daily Commutings: 30.3 million 7 38 million

#Daily Commutings with MINIBUS → 6.6 million (2023) \ 6.4 million (2040)

