

# |TRIPPY

## LEADING TRAVEL BIG DATA AND DIGITAL TRANSFORMATION

### GROUP PRESENTATION

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# BUSINESS PROBLEM

FROM CUSTOMER PERSPECTIVE

## Meet Jimmy

Jimmy booked his ticket to London from Belgium with British Airways and will stay at The Westbury Hotel for 6 nights.



What should Jimmy do during his visit in London?



Pre Travel Solution - “Do Your Own Research”

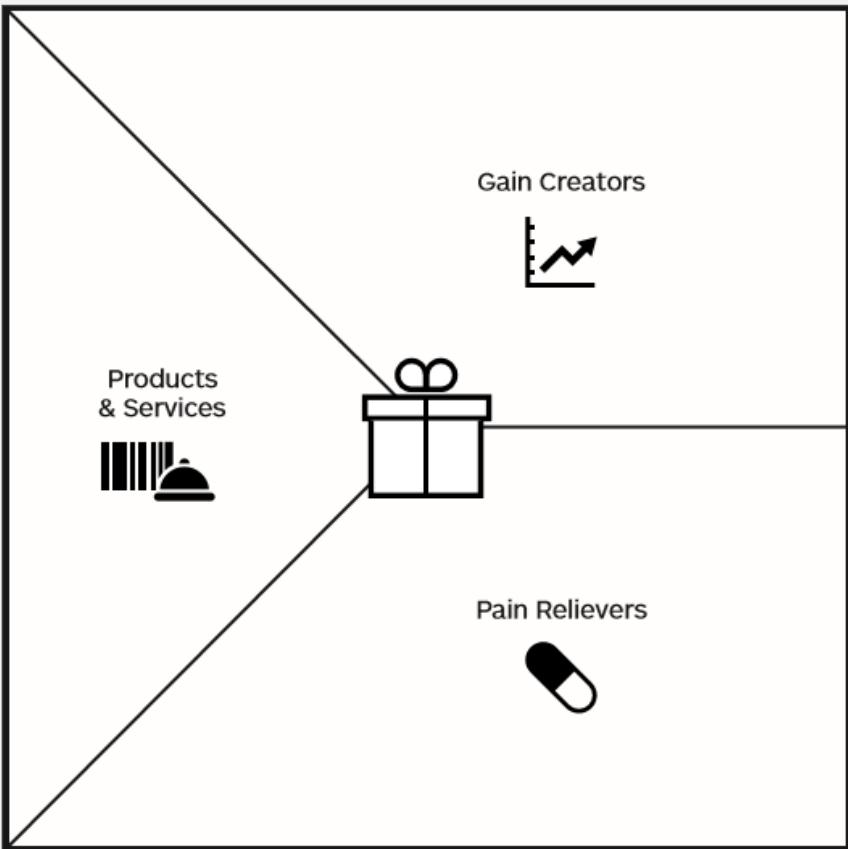
- Too much information available on the internet
- Different preferences
- Time consuming

On Travel Solution – “Ask Your Concierge”

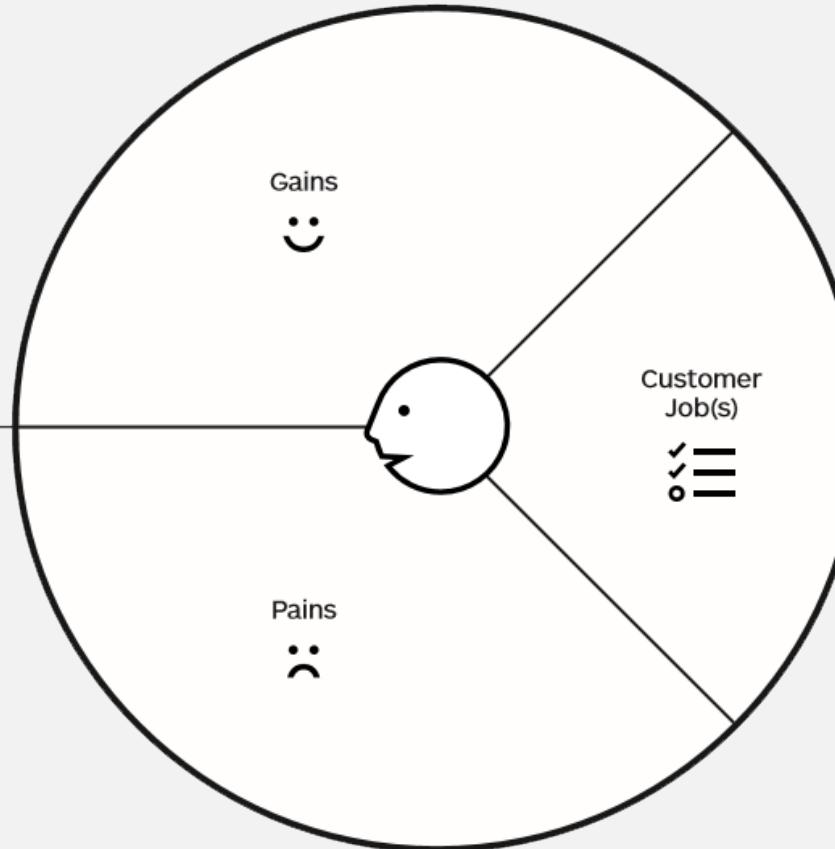
- Long queues to get tickets
- Fully booked
- Premium mark-up price

# VALUE PROPOSITION CANVAS

## Value Proposition



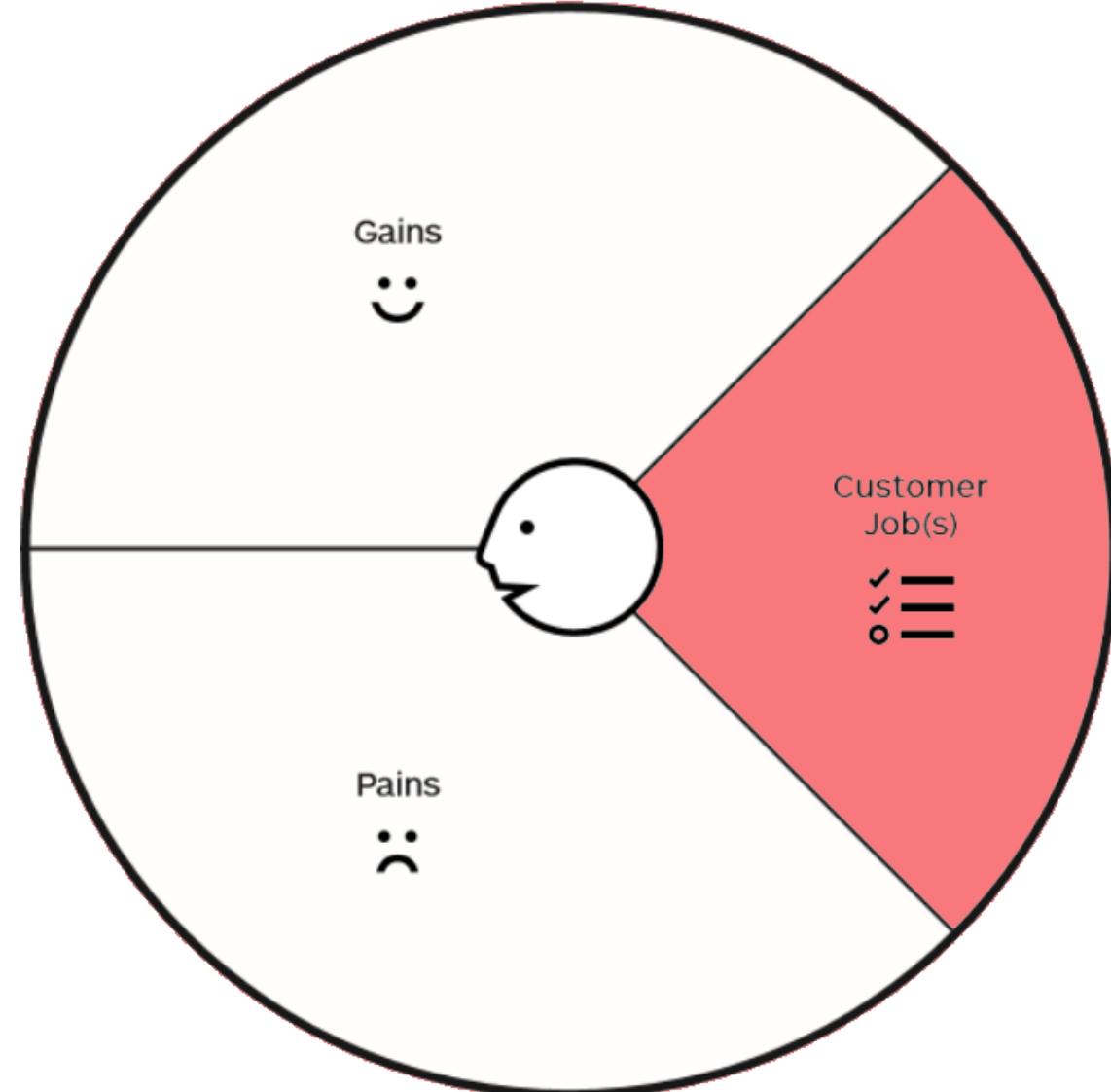
## Customer Profile



# CUSTOMER PROFILE JOBS

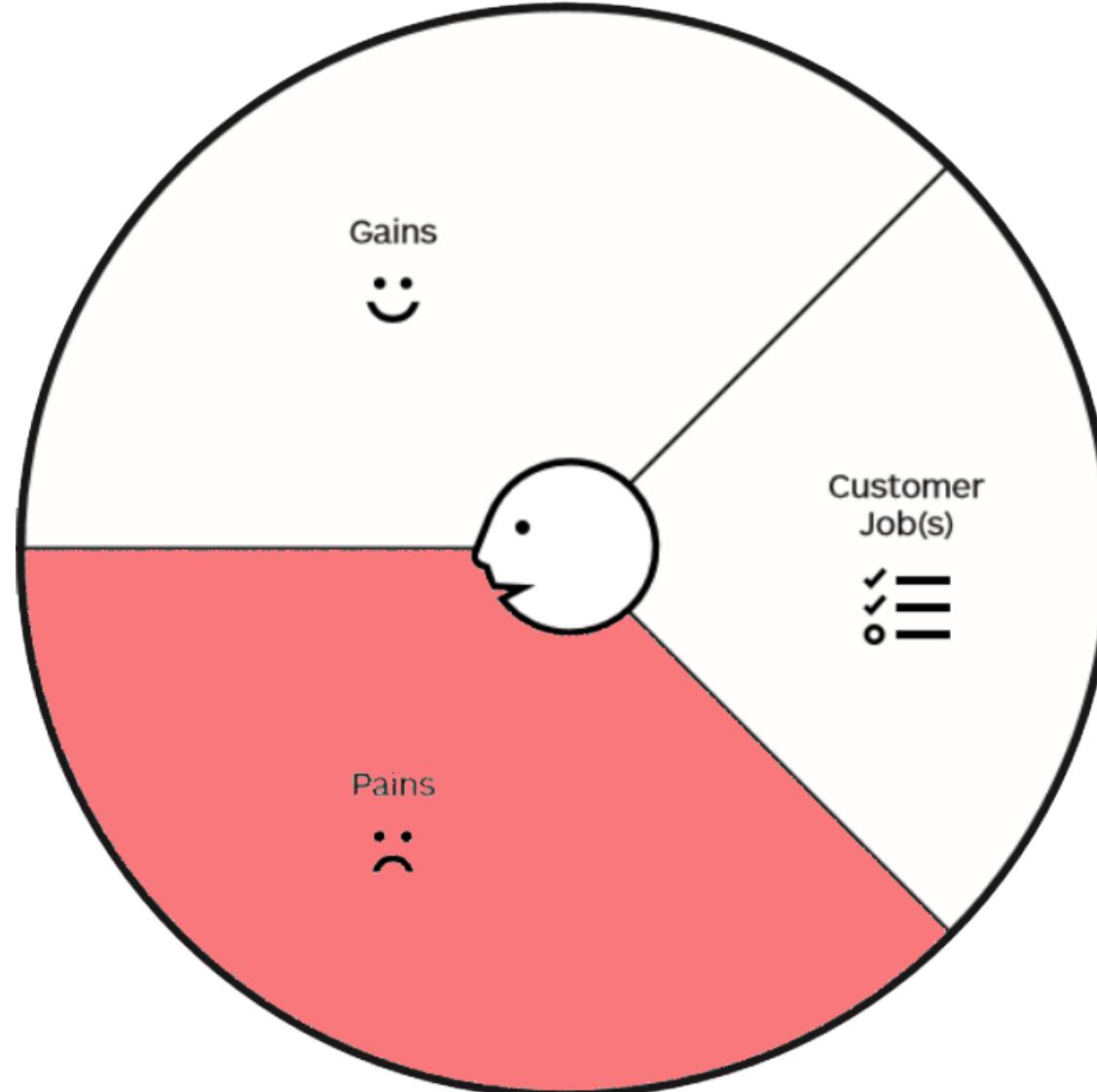
What are customers trying to get done in their work and lives?

- Find attractions at point of destination
- Utilize limited vacation time in the best possible way
- Peace of mind



## CUSTOMER PROFILE PAINS

- Limited local knowledge
- Low support from booking platforms at point of destination
- Inefficient activity planning
- Uncertainty about profile-activity fit



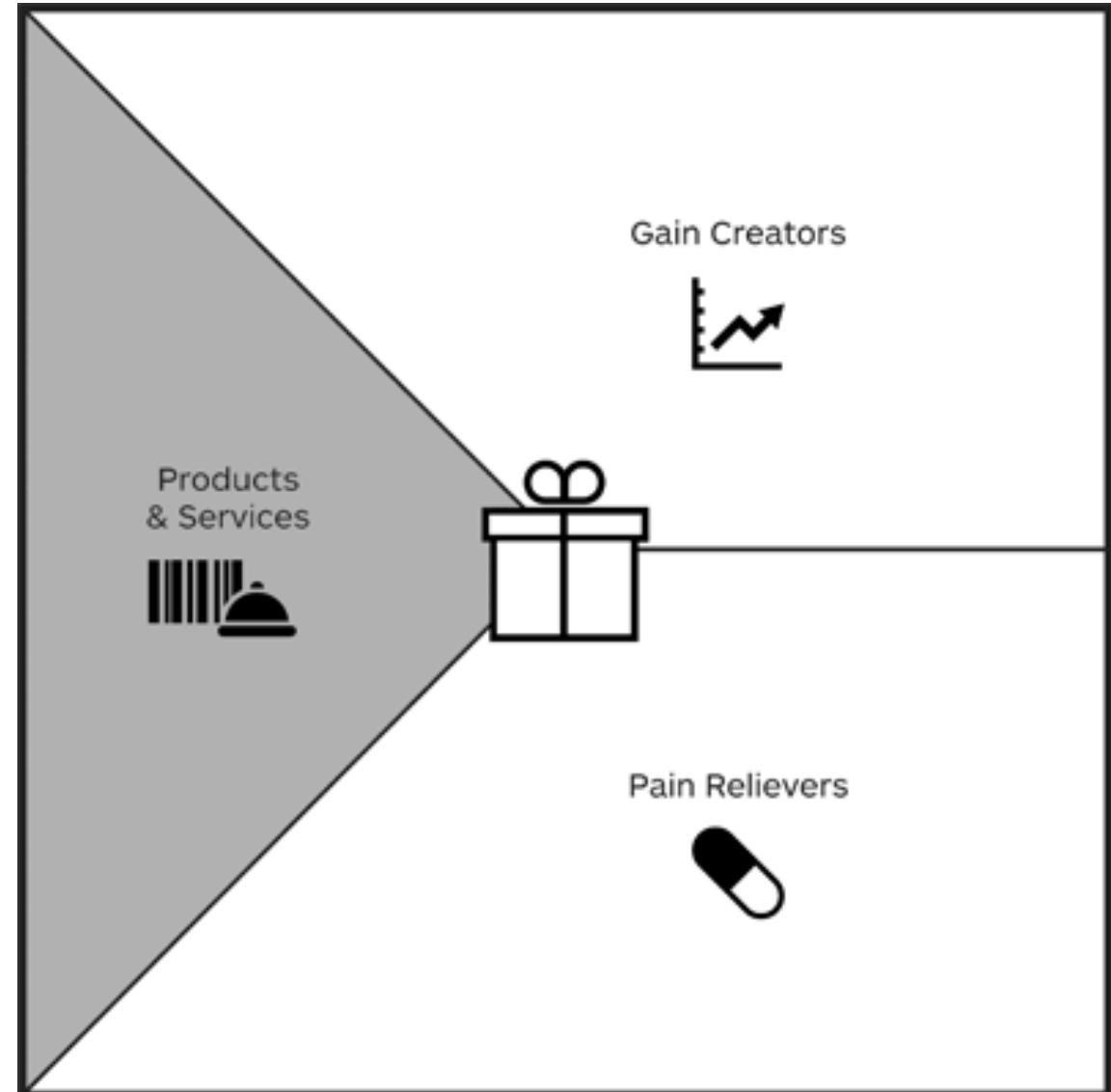
# CUSTOMER PROFILE GAINS

- Enjoy and share unique experiences
- Customized experiences
- Save time and effort
- Lower risk
- Functional utility



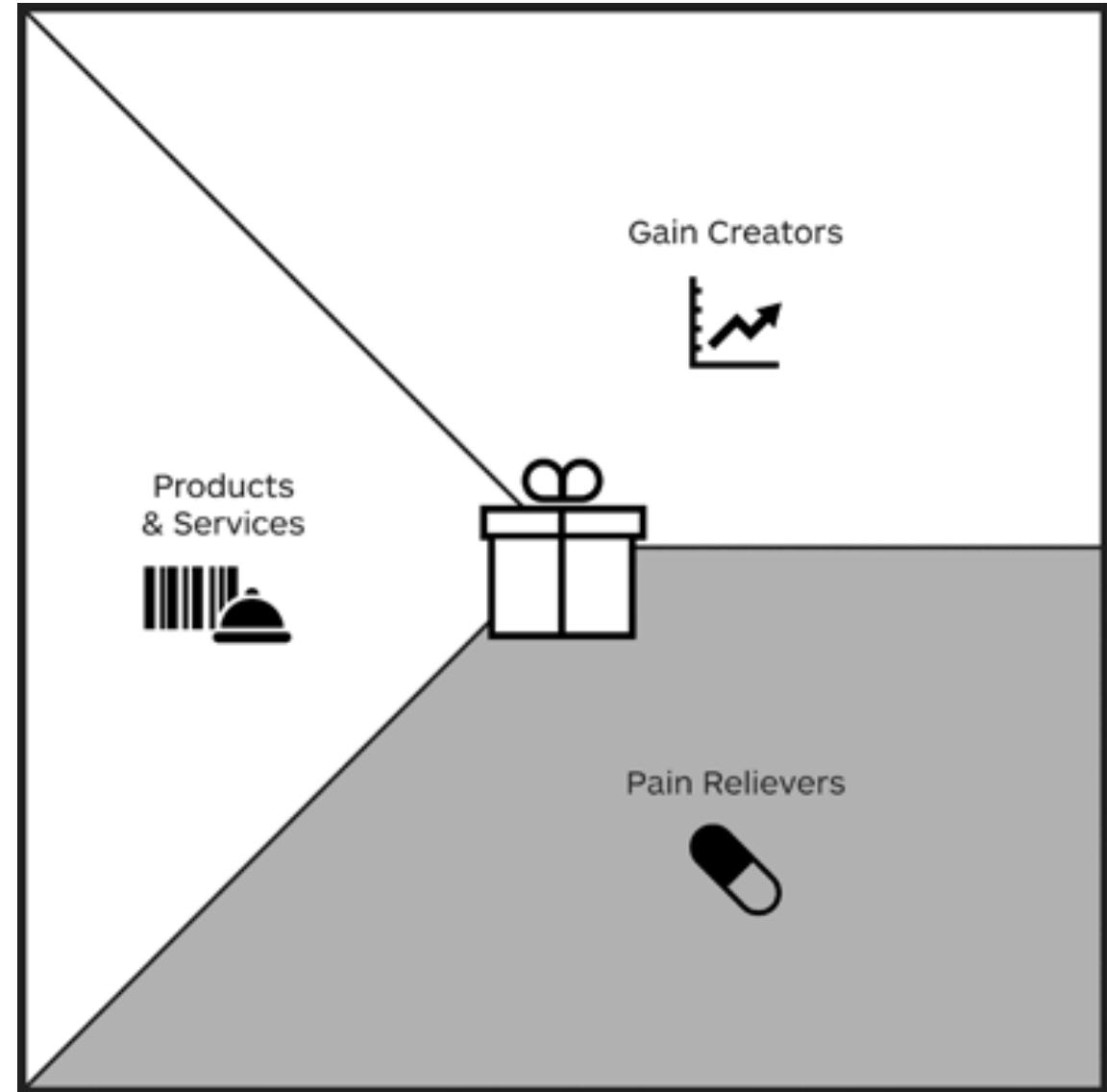
# VALUE PROPOSITION PRODUCT & SERVICE

- Application that offers customized experiences for the customers based on themes  
*(action, sport, sights, relaxation, etc.)*
- Individual / personalized recommendations based on preferences and past experiences
- 24h support



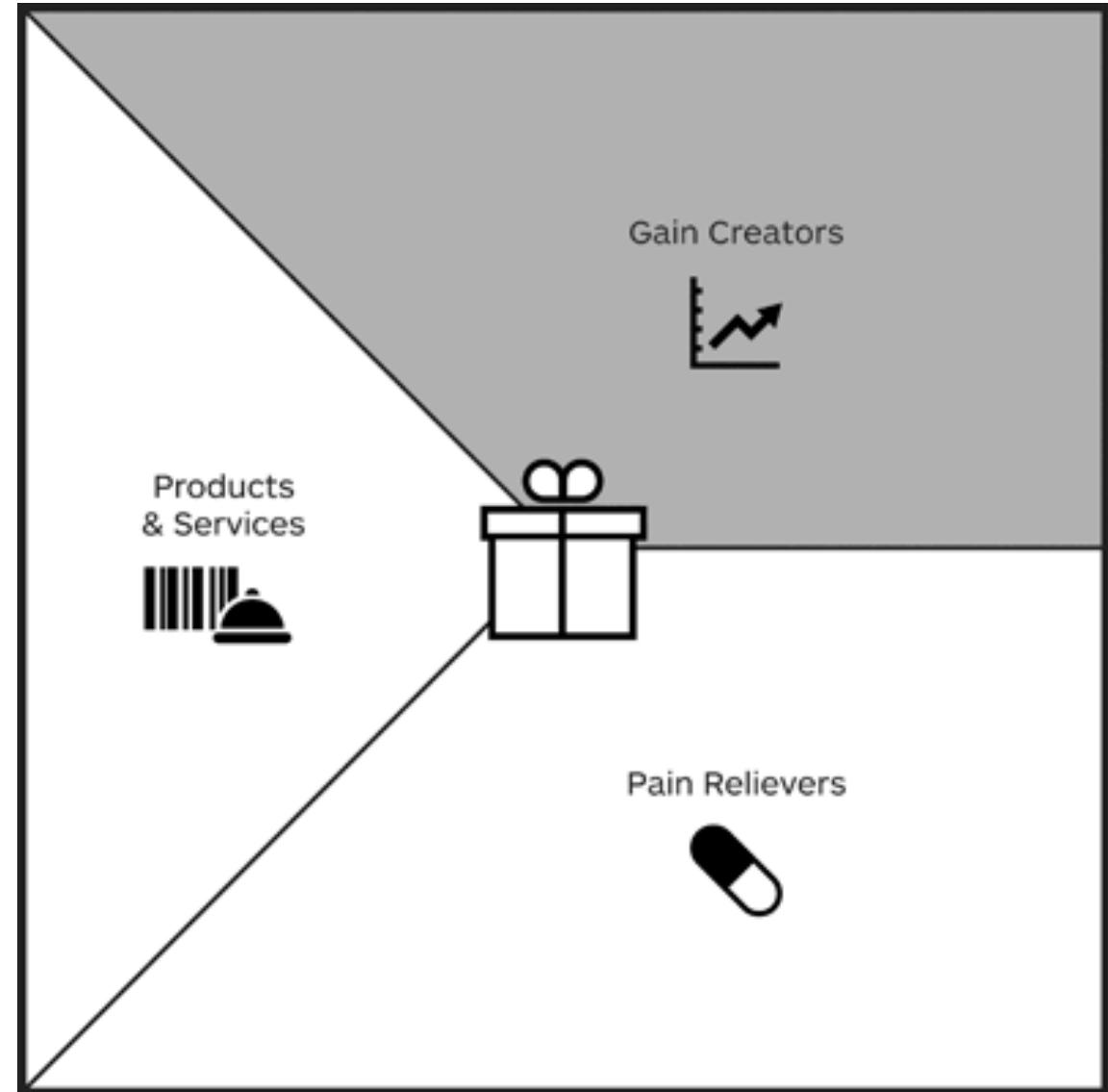
# CUSTOMER PROFILE PAIN RELIEVERS

- Database with all available options
- Customized Recommendation System for users
- All options in one application

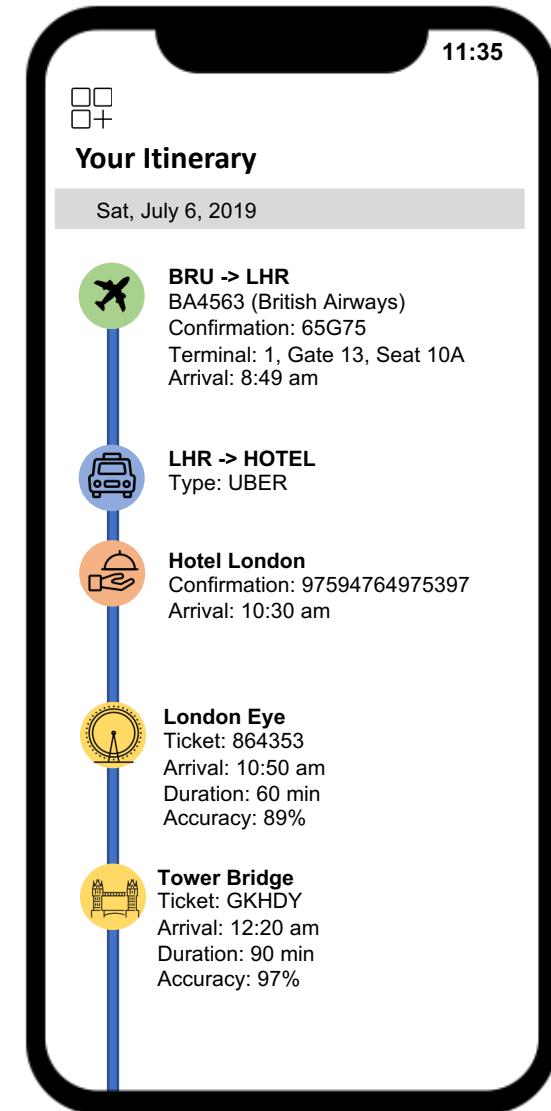
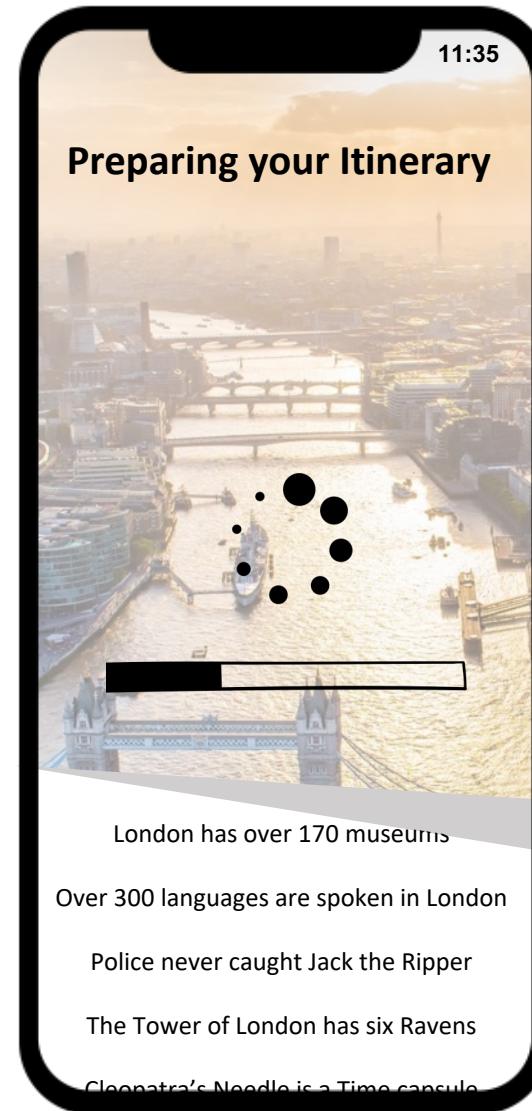
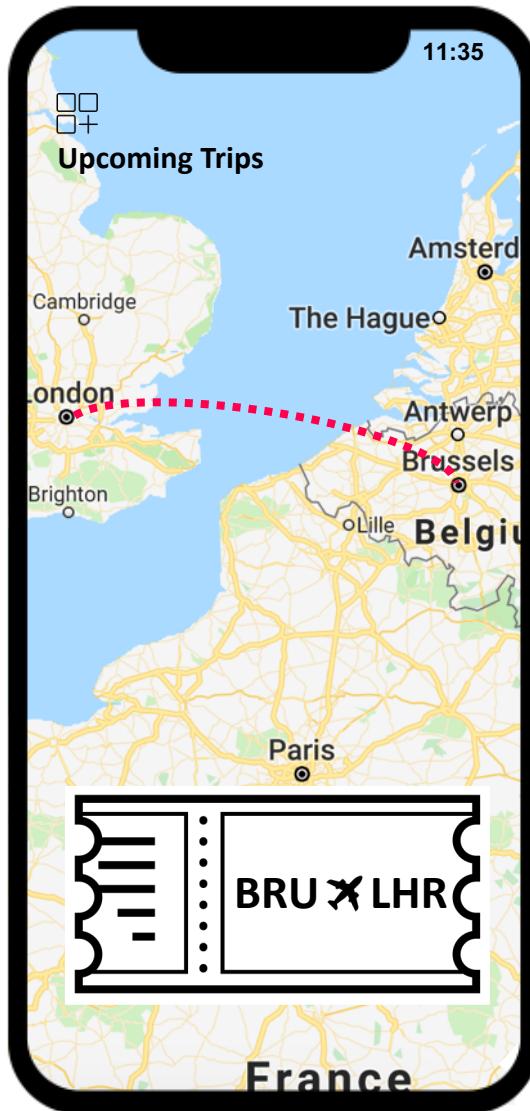
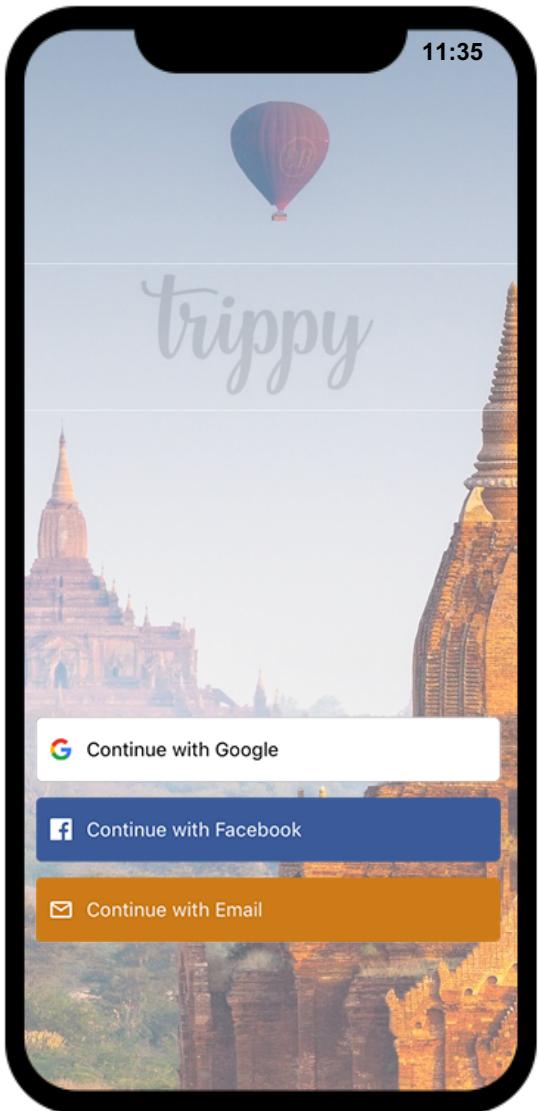


# CUSTOMER PROFILE GAIN CREATORS

- Recommendation engine based on past experiences
- Algorithm customizes offers
- Verified travel partners

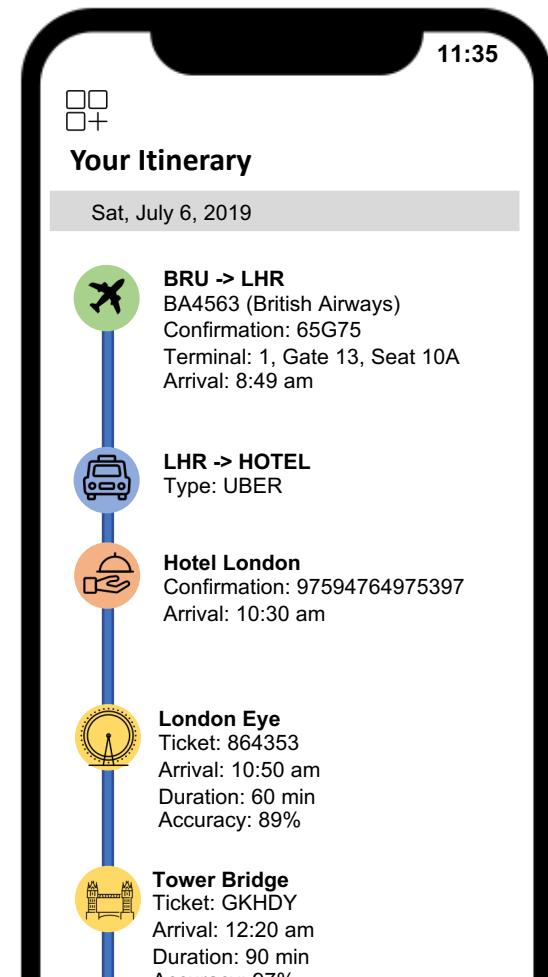
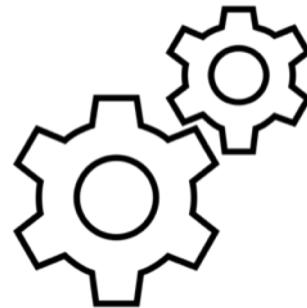
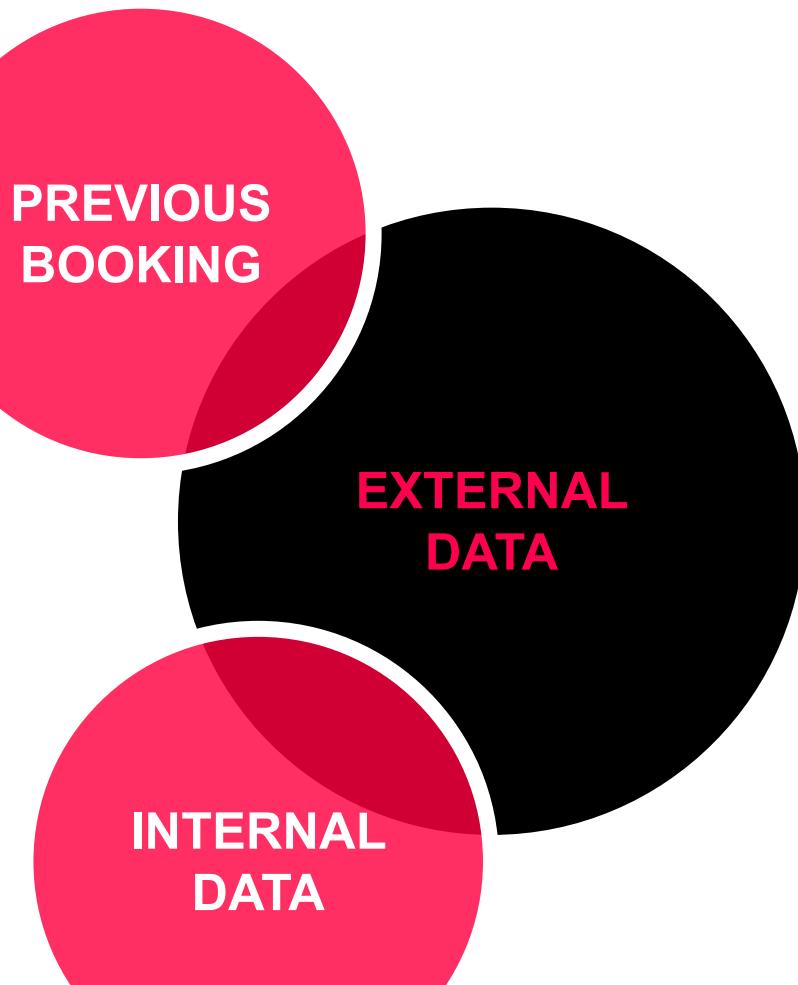


# TRIPPY DEMO



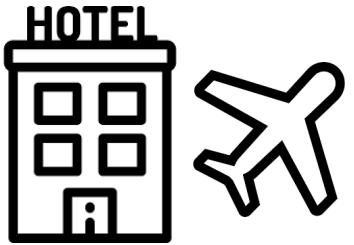
# HOW DOES THE MAGIC WORK?

DATA SOURCES → ALGORITHM → ROUTE OPTIMIZATION → END RESULT



# DATA SOURCES

## BOOKING DATA



- Hotel bookings
- Flight bookings
- Fork App data
- Events to attend
  - Football match
  - Concert
  - Conference

## INTERNAL DATA



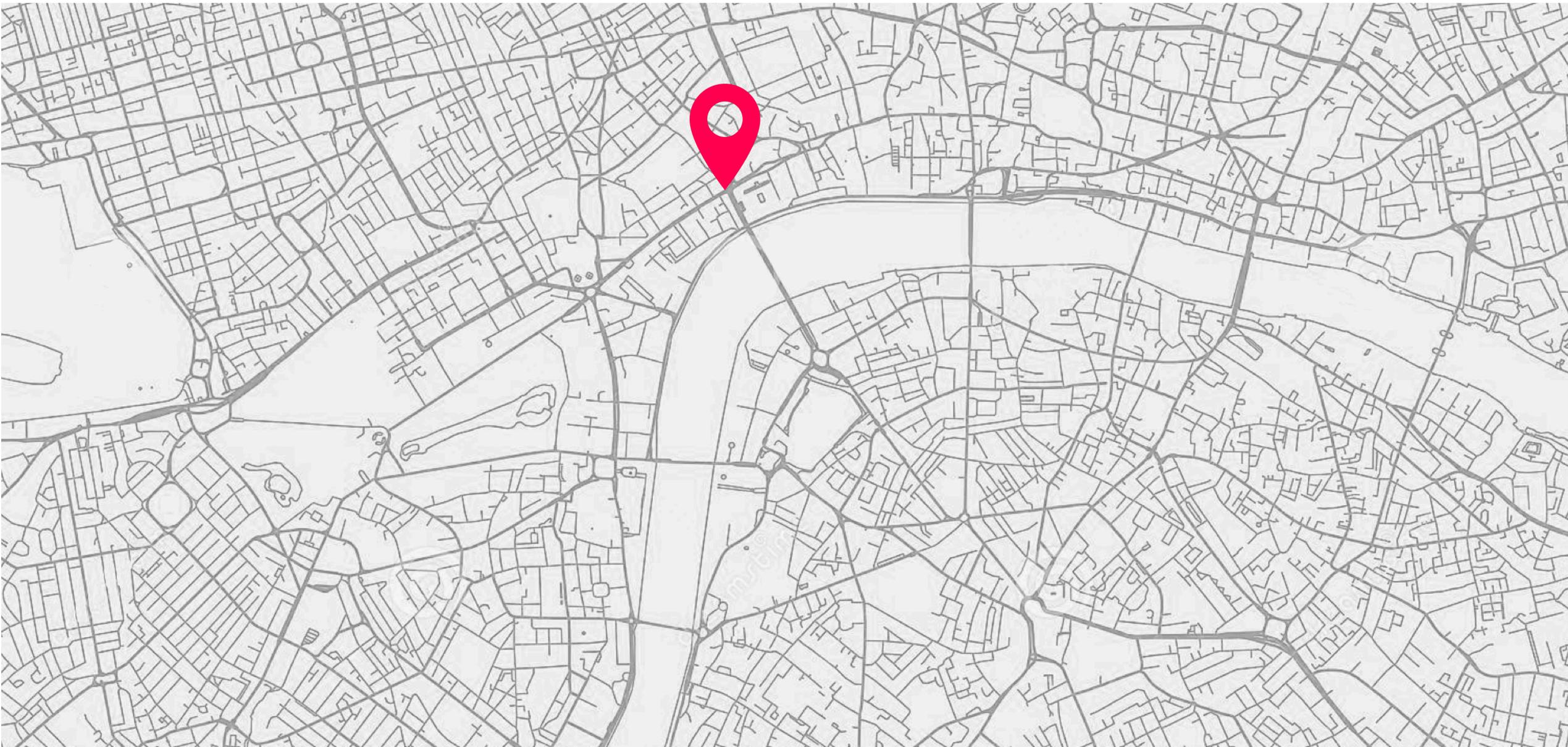
- Internal data
  - Pictures uploaded
  - Ratings/Comments
  - Average booking purchase price
  - Number of companions
  - Car rental frequency

## EXTERNAL DATA



- Social Network data
- Health Kit App data in smartphone
- API integration to book museums, concerts, ...
- Google Trends data

# DATASOURCES MAP



ALGORITHM  
WE APPLY THE 'NETFLIX MODEL'

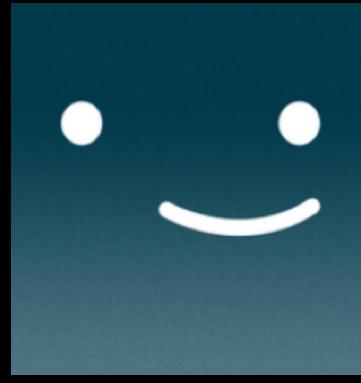
# Who's Travelling?



Jimmy



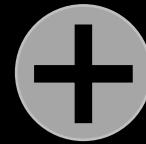
Zaina



Sofia



Kids

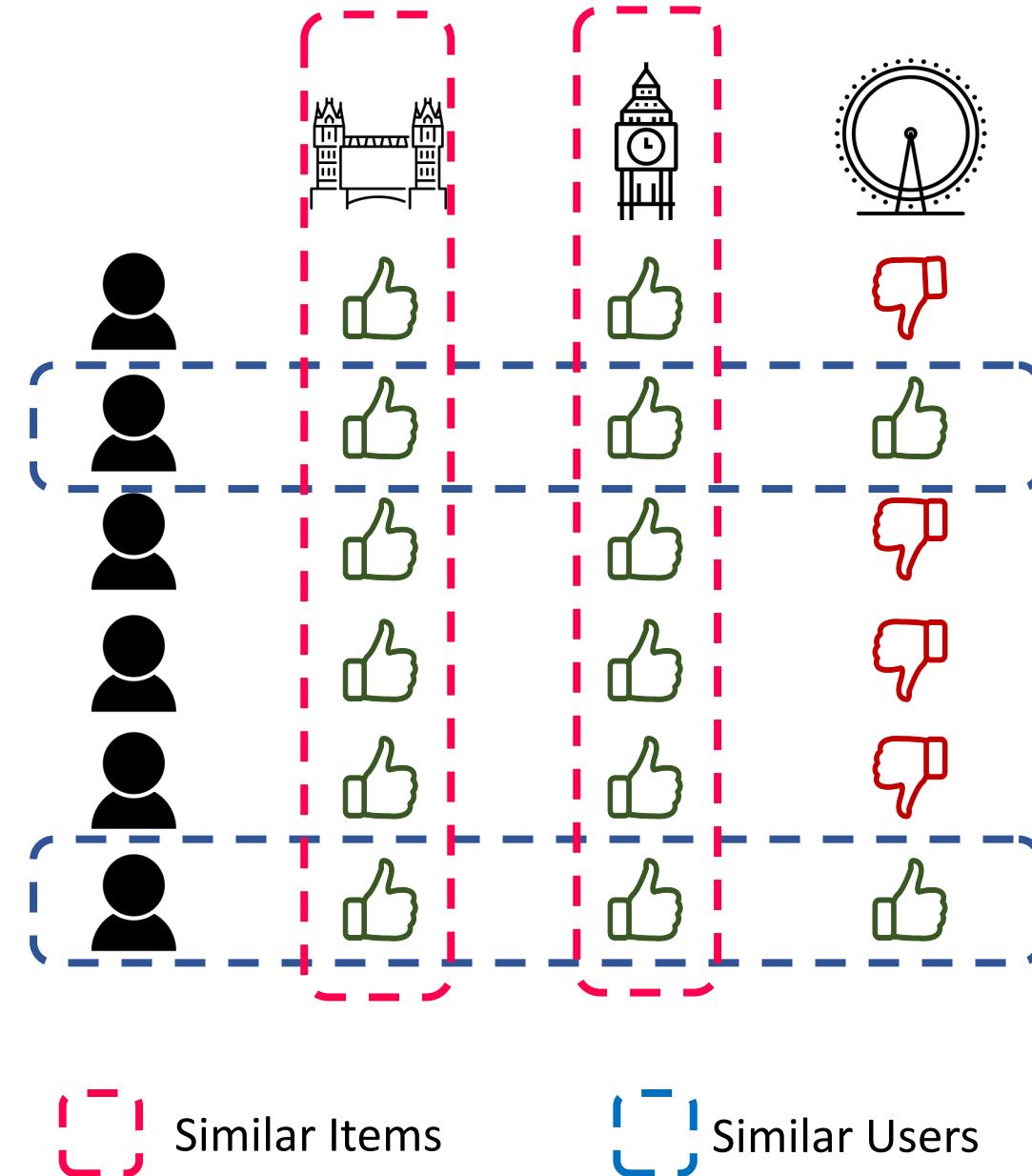


Add

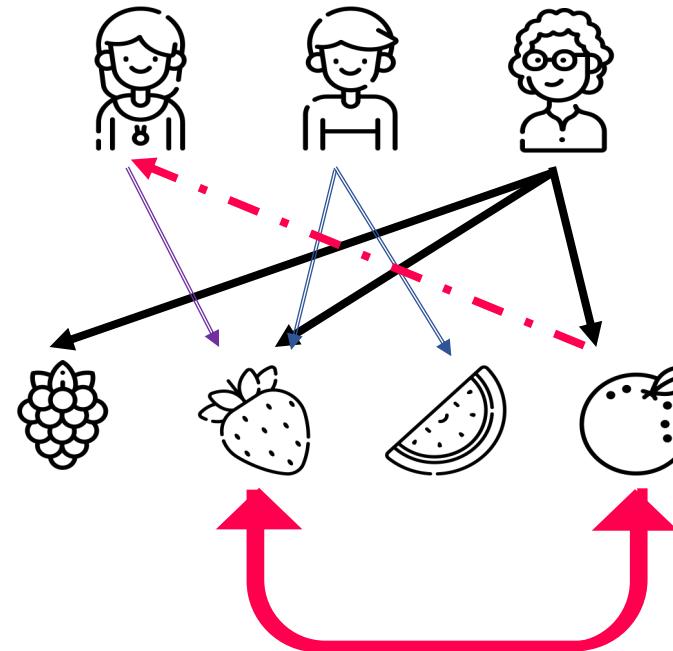
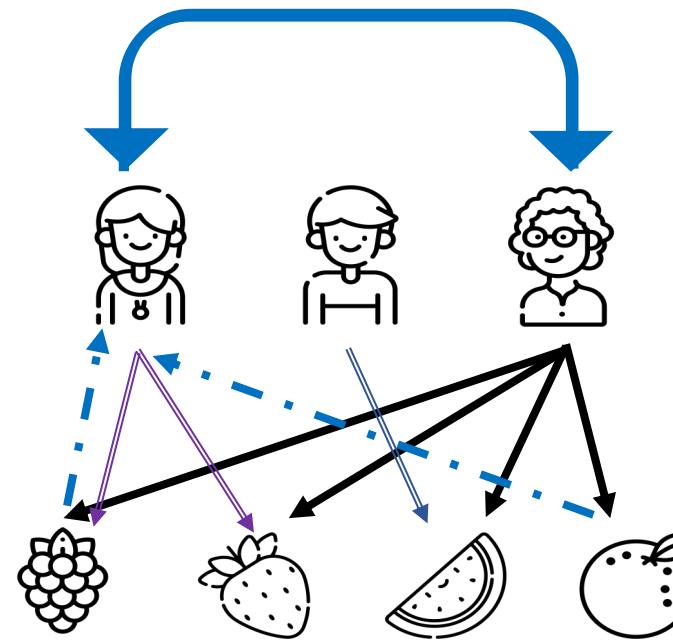
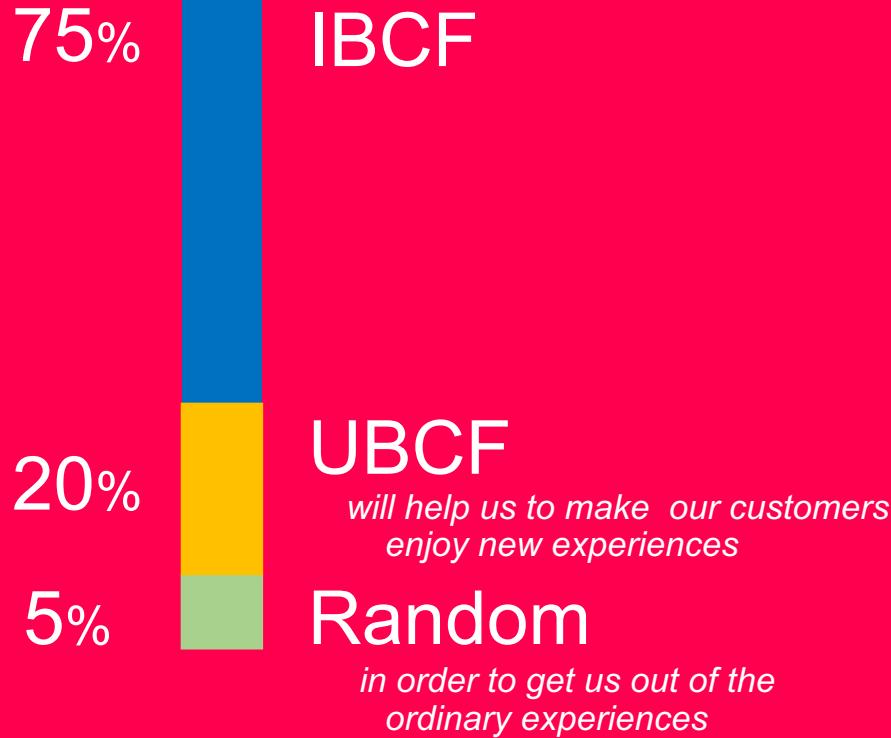
# CF - BASED RECOMMENDER

- Recommender systems are algorithms aimed at suggesting relevant services/items to users
- It is usually easier to find similar items than similar users
- Customer preferences change over time and this can negatively impact UBCF

A hybrid algorithm is usually a good option



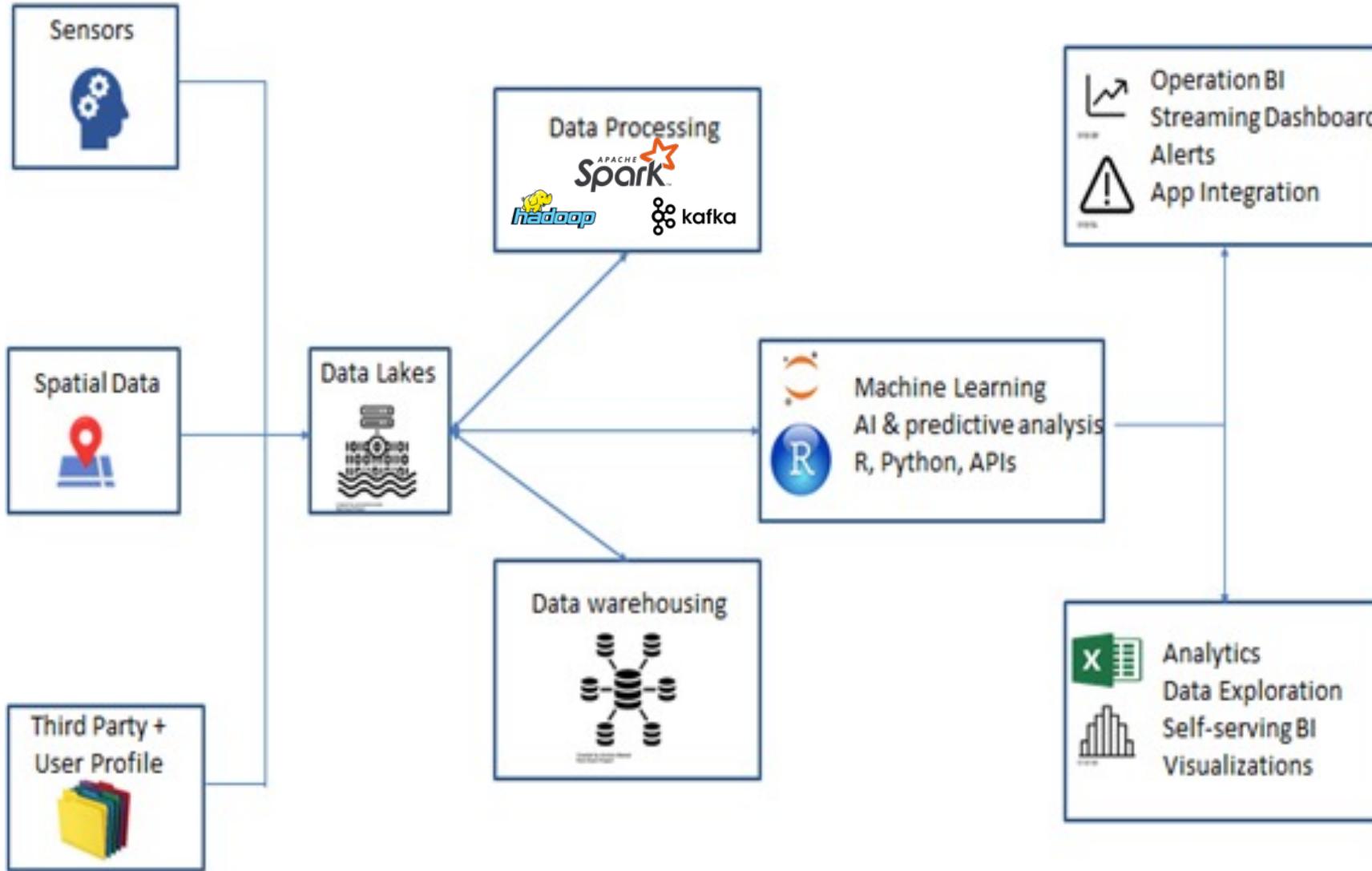
We mainly need  
IBCF and UBCF



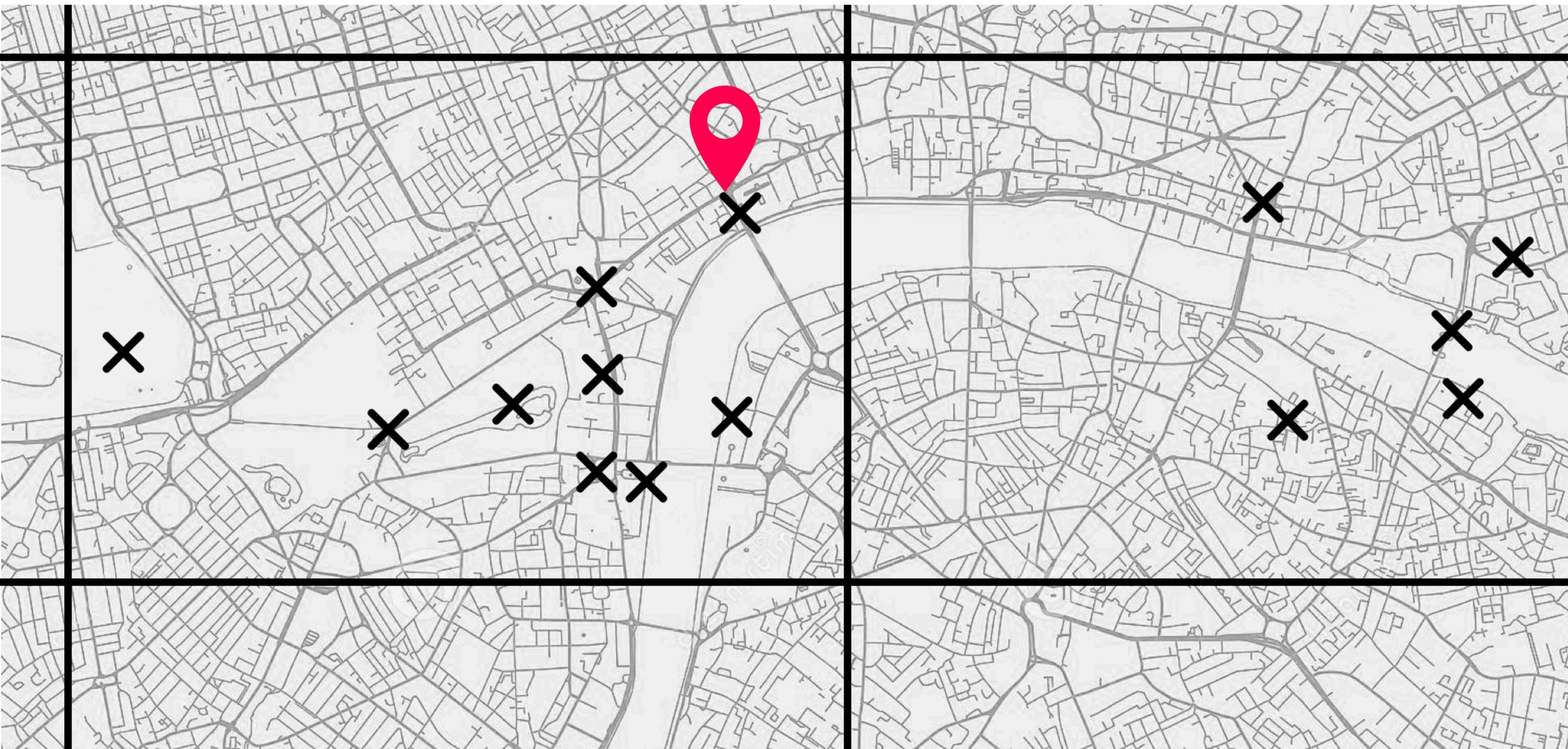
User-based Filtering

Item-based Filtering

# INFRASTRUCTURE MAP



# ALGORITHM MAP



# ROUTE OPTIMIZATION



Current time



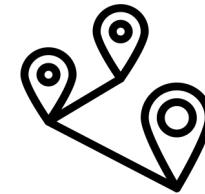
Mobility pattern



Traveler type



GPS location



Distance



Live traffic



Weather



Opening hours



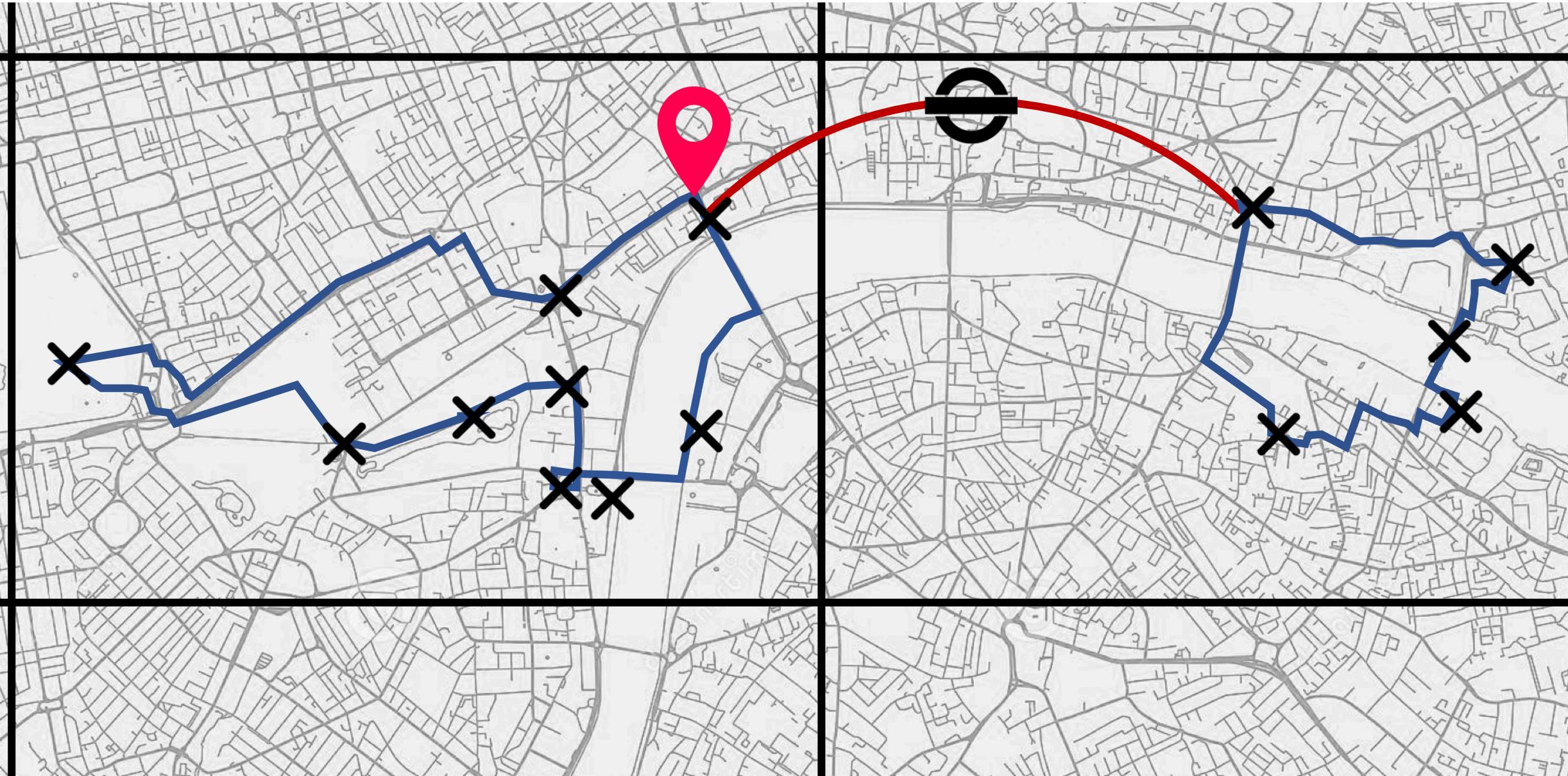
Events



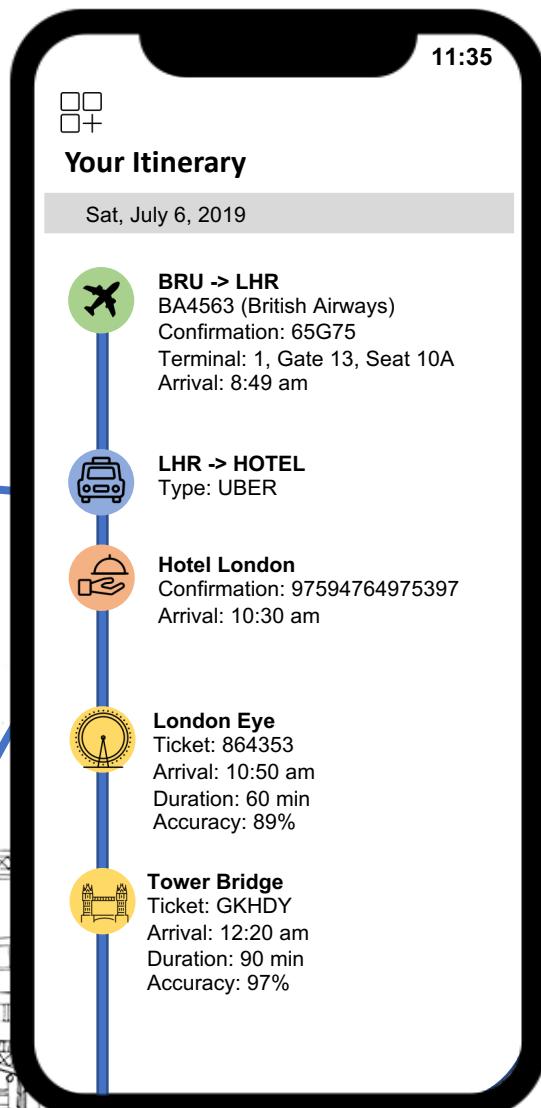
Available transports

```
Using Spark's default log4j profile: org/apache/spark/log4j-defaults.properties
Setting default log level to "WARN".
To adjust logging level use sc.setLogLevel(newLevel). For SparkR, use setLogLevel(newLeve
l).
```

# ROUTE OPTIMIZATION MAP

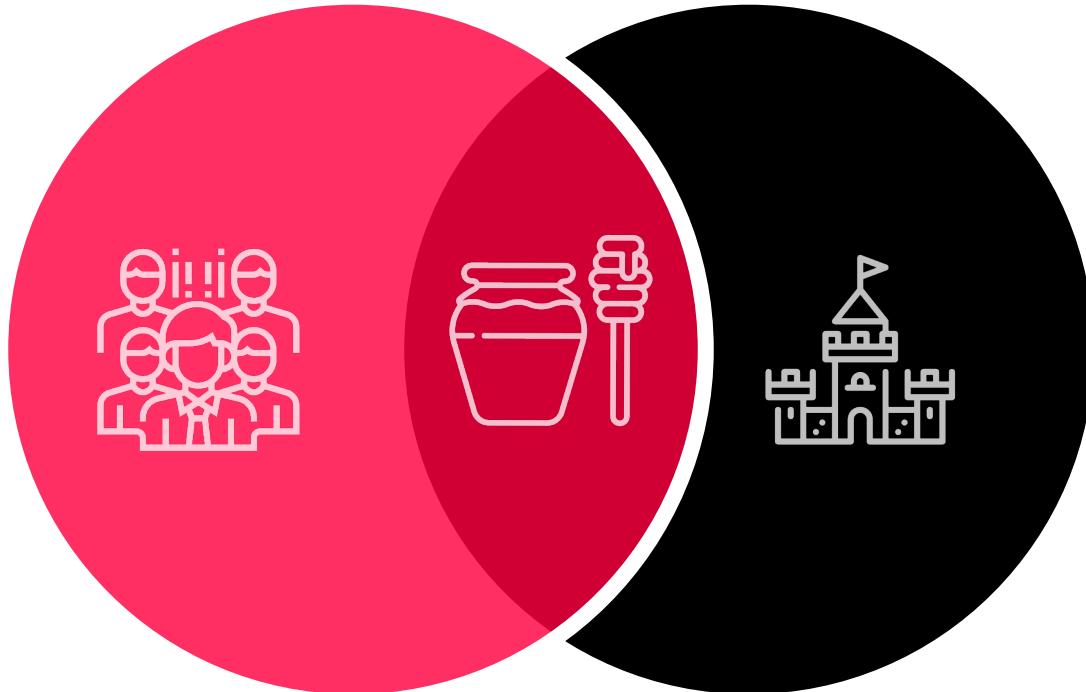


# CUSTOMIZED ITINERARY



# SWEETSPOT ANALYSIS

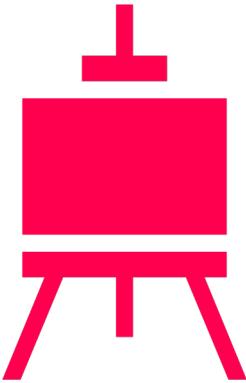
- Personalized travel catalog
- Online reservation system
- Pay net rates for tour operators
- Enjoy only 1 booking procedure for all providers



- Direct contact with travelers
- Less marketing expense
- Higher exposure in the market that lead into sale increase
- Focus on the operations
- Custom payment policies

*trippy*

# BUSINESS MODEL VALUE CANVAS AND VALUE PROPOSITION CANVAS



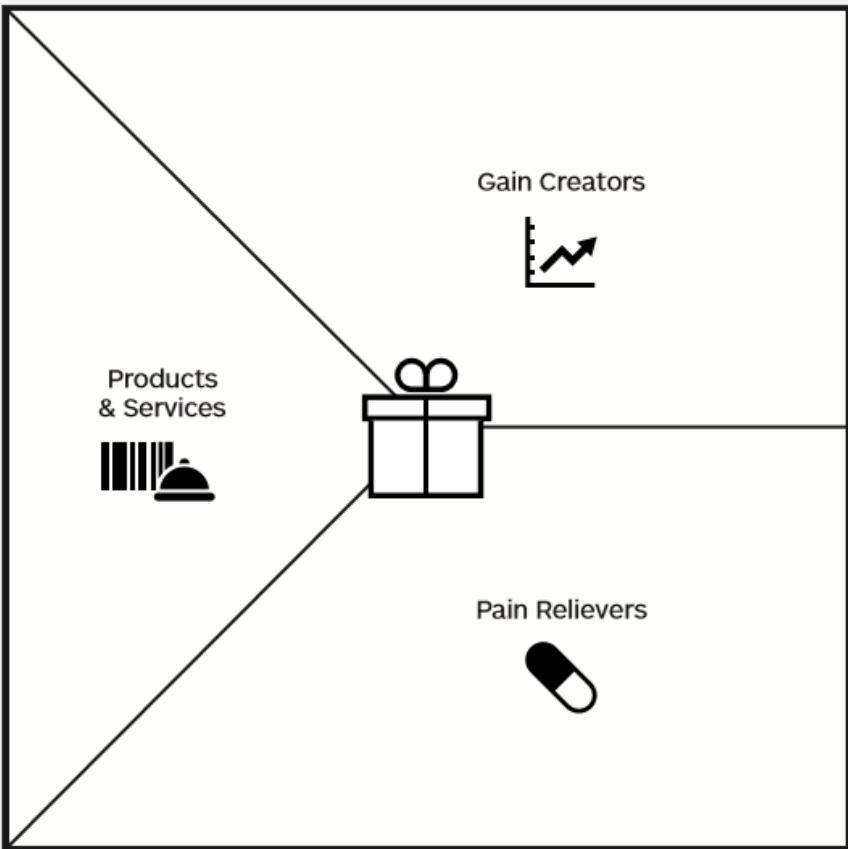
The Business Model Canvas helps us  
to create value for our ***business***



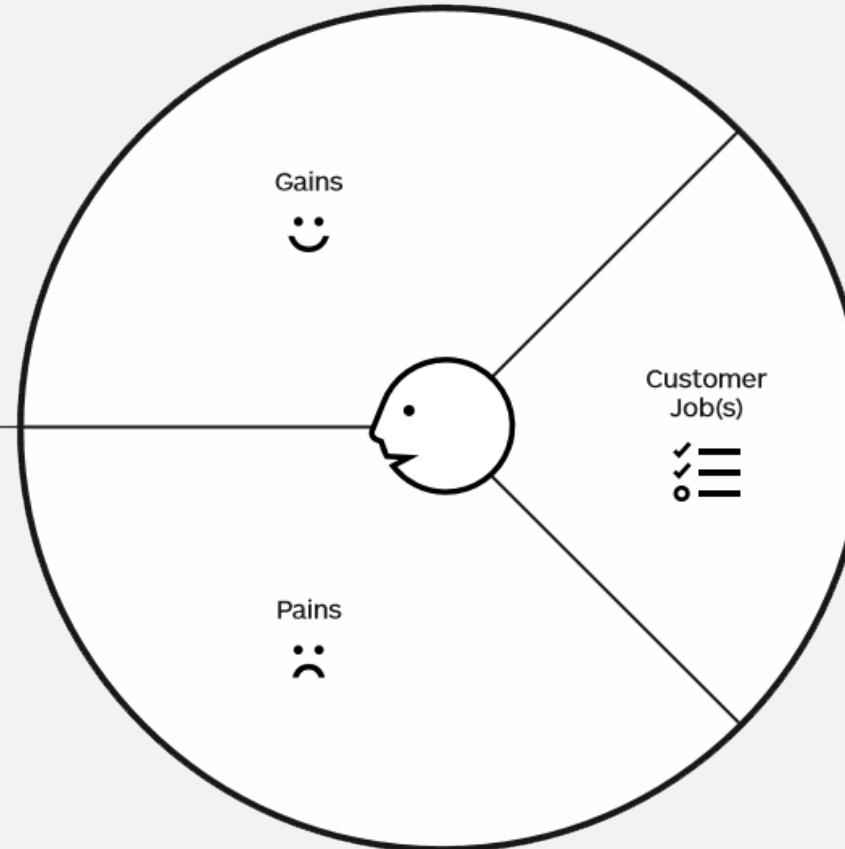
The Value Proposition Canvas helps  
us to create value for our ***customers***

# VALUE PROPOSITION CANVAS

## Value Proposition



## Customer Profile



# BUSINESS MODEL VALUE CANVAS

Key Partners	Key Activities	Value Propositions	Customer Relationships	Customer Segments
Cost Structure	Key Resources		Channels	
Revenue Stream				
<ul style="list-style-type: none"> <li>○ Key Partners:           <ul style="list-style-type: none"> <li>1. Tour operator</li> <li>2. Local guides</li> <li>3. Sights</li> <li>4. Event &amp; festival organisers</li> </ul> </li>   <li>○ Key Suppliers:           <ul style="list-style-type: none"> <li>1. Cloud storage</li> <li>2. Customer service agents</li> <li>3. TripAdvisor, Google, etc. / any data company with reviews</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>○ Data sources/API integration</li> <li>○ Development of software algorithms</li> <li>○ Building partnerships with Suppliers and Partners</li> </ul>	<ul style="list-style-type: none"> <li>○ Build unique travel itineraries through analysing big data</li> <li>○ Simplify all travel planning based on personal preference</li> <li>○ Maximise their trip experience</li> <li>○ Time Saving</li> </ul>	<ul style="list-style-type: none"> <li>○ Automatic service</li> <li>○ Customer support team</li> <li>○ B2B</li> <li>○ B2C</li> </ul>	<ul style="list-style-type: none"> <li>○ Customers with smartphone/tech savvy</li> <li>○ Leisure travellers: middle class and upper-middle class</li> <li>○ Business travellers: not price sensitive</li> </ul>



**760 million +**

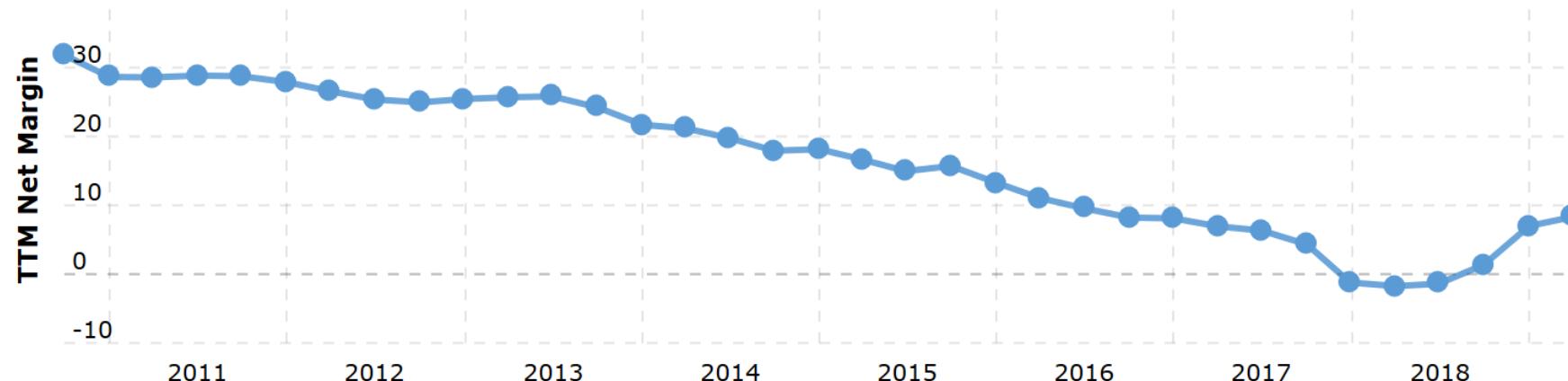
Unbiased travel reviews

**\$1.615 billion**

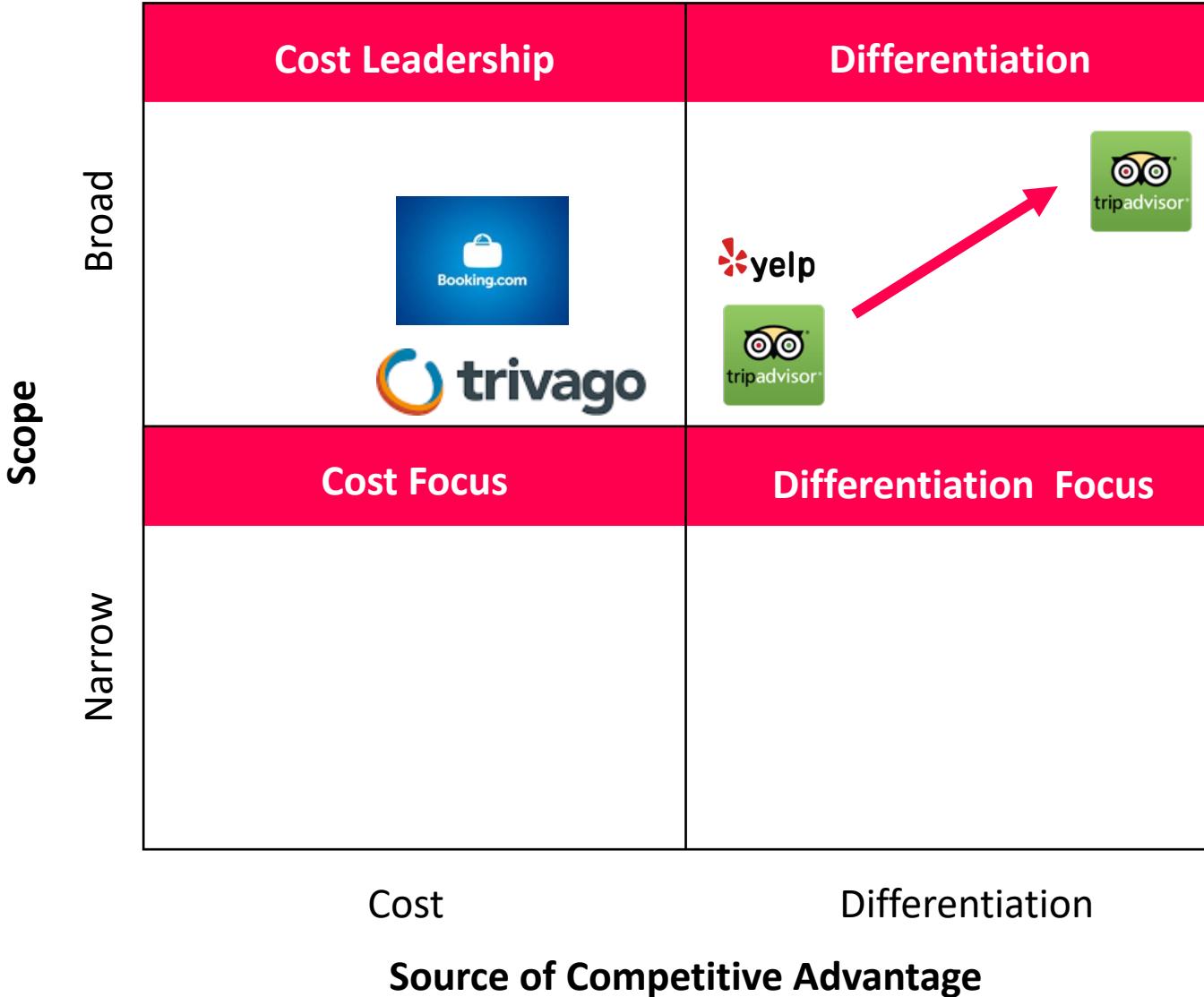
Annual revenue for 2018, a 3.79% increase from 2018

**One in 16**

People on earth use TripAdvisor.com to plan a trip



# STRATEGIC POSITIONING



## Analysis of Advantages for each Services

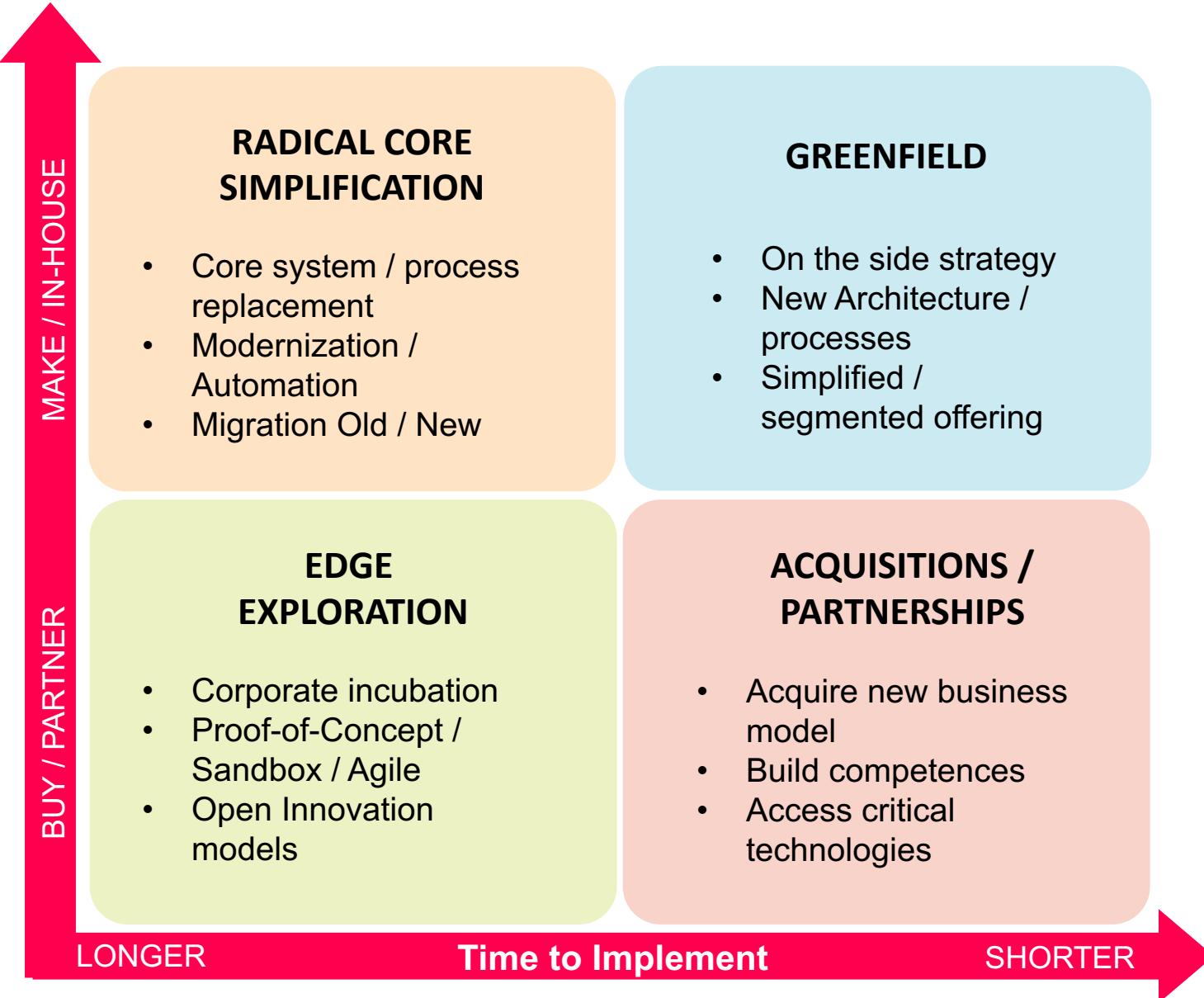


# DIGITAL ROAD MAP

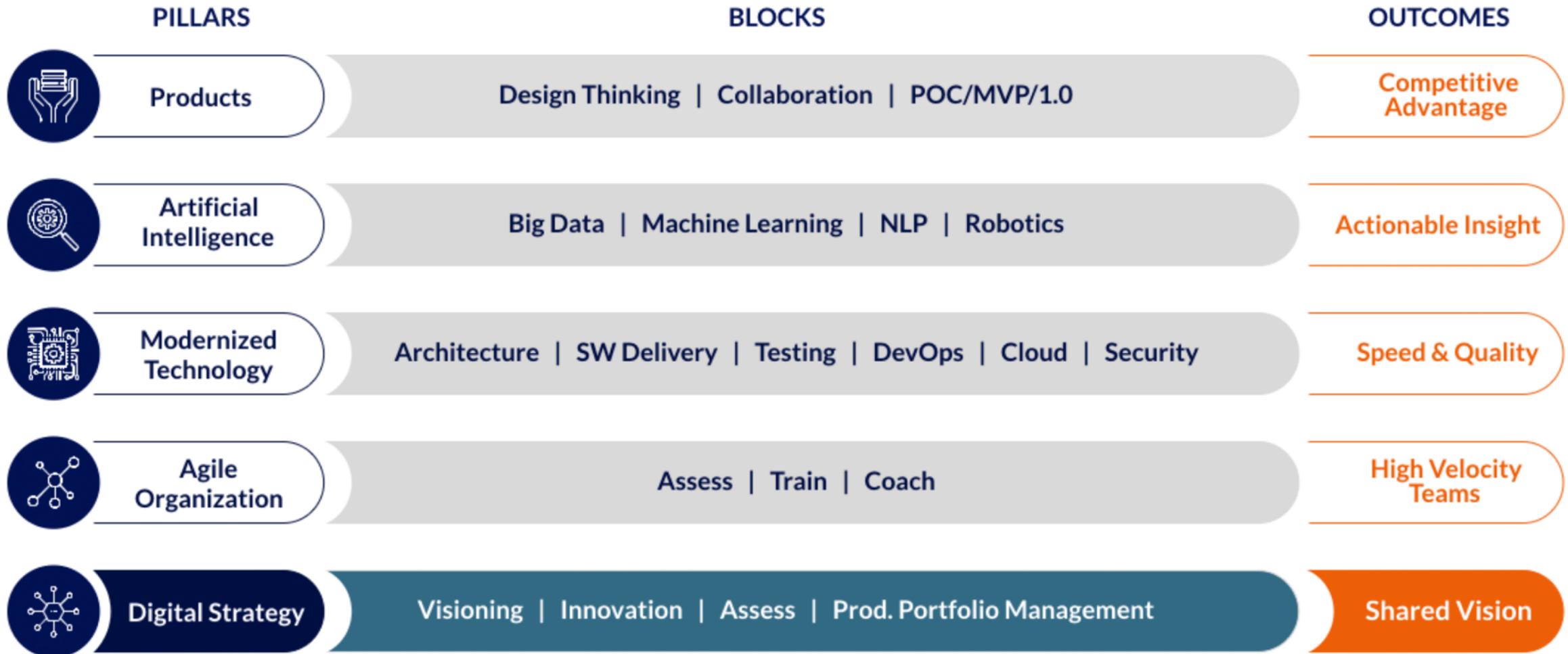
## DIGITAL ROAD MAP



# DIGITAL TRANSFORMATION PORTFOLIO



# DIGITAL TRANSFORMATION FRAMEWORK





# COMPETITORS



NIQUESA  
TRAVEL



Booking.com



# TARGET CITIES



# RISKS



## DISRUPTIVE INNOVATION

Peer-to-peer renting  
(AirBnB, HomeAway,  
OneFineStay...)

Concierge Service (BnB  
Sitter, John Paul...)

Substitute Accomodation  
(Hostels, EcoLodge...)

## TASTE, PREFERENCES AND BEHAVIORS

Millenials (different  
spending habits,  
destinations ...)

Responsible Tourism  
Local Feeling  
Personalized Experiences

# BIG DATA

## MARKETING ANALYTICS MATRIX

	<b>STRATEGIC KPI'S</b>	<b>WEB METRICS</b>	<b>SOCIAL MEDIA METRICS</b>	<b>MOBILE METRICS</b>	<b>OTHERS (Internal/External)</b>
<b>Acquisition</b>	<ul style="list-style-type: none"> <li>Brand Awareness</li> <li>Brand Mentions</li> <li>Avg. Opp. Size</li> <li>Cust. Acq. Cost</li> </ul>	<ul style="list-style-type: none"> <li>CTR</li> <li>Visitors <i>New/Returning Per Source Per Region ...</i></li> </ul>	<ul style="list-style-type: none"> <li>Followers</li> <li>Friends</li> <li>Connections</li> </ul>	<ul style="list-style-type: none"> <li>App Downloads</li> <li>App Registrations</li> </ul>	<ul style="list-style-type: none"> <li>Sentiment Analysis</li> <li>Open Data &amp; 3rd Party Data Metrics specific to Travel</li> </ul>
<b>Engagement</b>	<ul style="list-style-type: none"> <li>Brand Preference</li> <li># Brand Interactions per Day</li> <li>CLV</li> <li>Cust. Satisfaction</li> </ul>	<ul style="list-style-type: none"> <li>Visit Length</li> <li># Leads (funnel)</li> <li>Bounce Rate</li> <li>CPL / Visit Type</li> </ul>	<ul style="list-style-type: none"> <li>Likes</li> <li>Likes/Friend</li> <li>Thumbs Up</li> <li>RT/T – Hashtag</li> <li>Stories - Hashtag</li> </ul>	<ul style="list-style-type: none"> <li>Screens per Session</li> <li>Session Length</li> <li>App Store Ratings</li> </ul>	<ul style="list-style-type: none"> <li>Sentiment Analysis</li> <li>Open Data &amp; 3rd Party Data Metrics specific to Travel</li> </ul>
<b>Conversion</b>	<ul style="list-style-type: none"> <li>Conv. Rate &amp; Avg. Cost</li> <li>ROMI</li> <li>Up &amp; Cross-Selling</li> </ul>	<ul style="list-style-type: none"> <li>Clicks/Purchasing User</li> <li># Hotleads &amp; # Sales</li> <li>Registrations</li> <li>CPHL / CPA (per src.)</li> </ul>	<ul style="list-style-type: none"> <li>Sales attrib. To SM</li> <li># Sales/Eng. Rate</li> <li>Key Influencers</li> <li>Reach of Messaging</li> </ul>	<ul style="list-style-type: none"> <li>ARPU;</li> <li>App Purchases &amp; Subscriptions: In-app Transactions</li> </ul>	<ul style="list-style-type: none"> <li>Sentiment Analysis</li> <li>Open Data &amp; 3rd Party Data Metrics specific to Travel</li> </ul>
<b>Retention</b>	<ul style="list-style-type: none"> <li>Churn/Retent. Rate</li> <li>% of Repeat Cust.</li> <li># Bought Suggestion</li> <li># of uninstalled Apps</li> <li>Advocacy/NPS</li> </ul>	<ul style="list-style-type: none"> <li># Registered Visitors</li> <li>Visits/Time</li> <li>Sale/TIme</li> </ul>	<ul style="list-style-type: none"> <li>Duration of Eng.</li> <li>Mentions per time and User</li> <li>MgM (Member Get Member)</li> </ul>	<ul style="list-style-type: none"> <li>1-weeks Retention</li> <li>n-weeks Retention</li> </ul>	<ul style="list-style-type: none"> <li>Sentiment Analysis</li> <li>Open Data &amp; 3rd Party Data Metrics specific to Travel</li> </ul>

# FINANCIALS

## 5 YEARS TARGET

	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
DEALS SOLD	48000 0.001%	96000 0.003%	288000 0.006%	576000 0.012%	1152000 0.024%

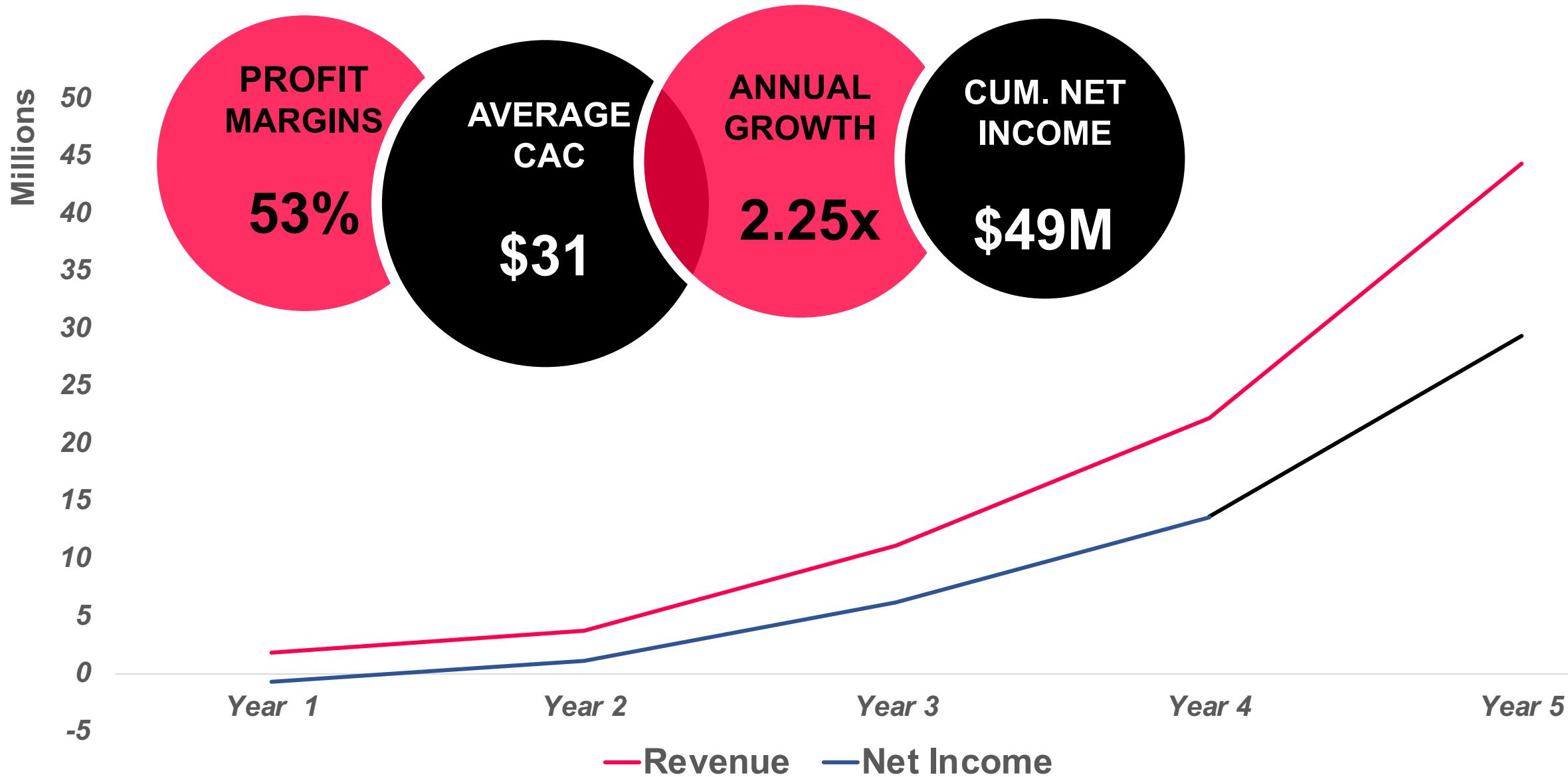


MARKET SIZE (VISITORS TO TripAdvisor)

**4.8 Billion!!**

# FINANCIALS

## PLANS FOR THE FIRST 5 YEARS



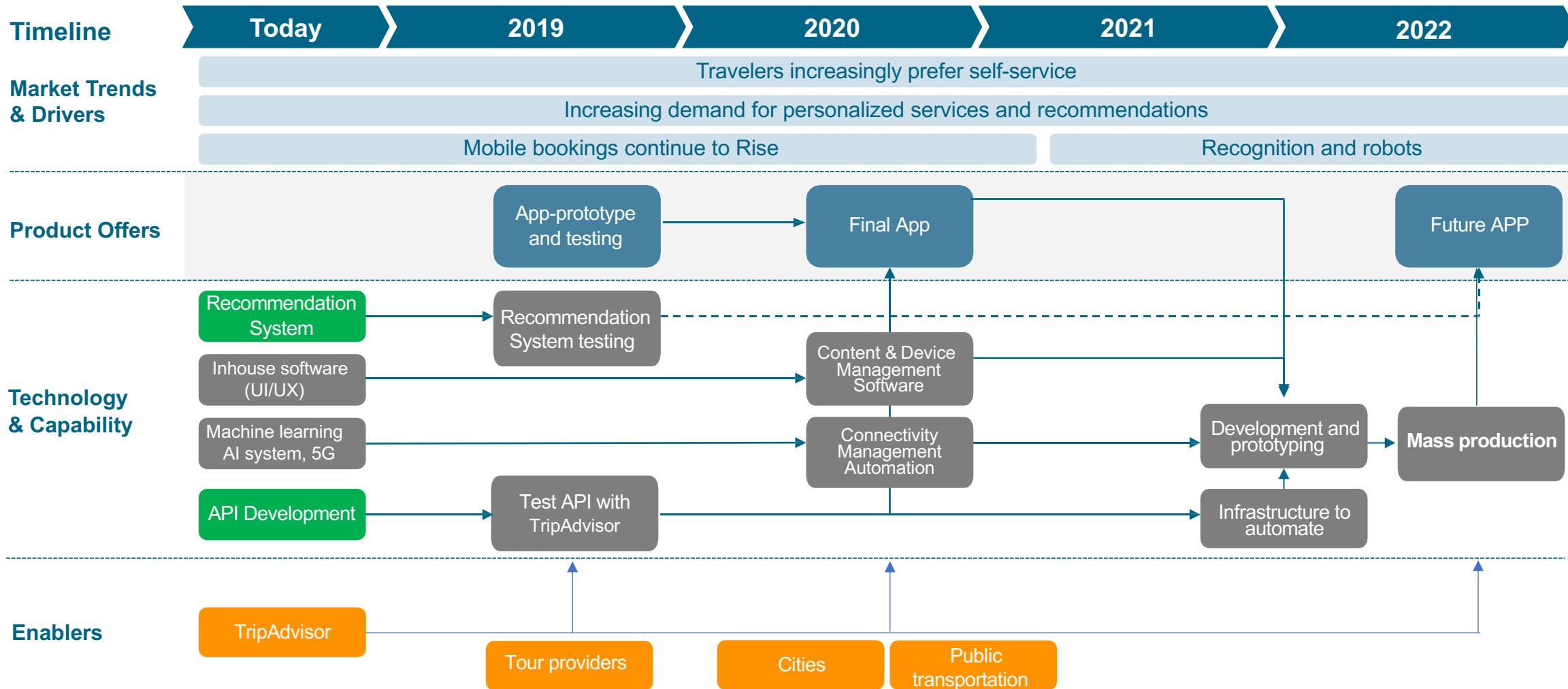
\$4 million

In Direct Investments Used To Cover COGS and SG&A  
Within First 2 Years

3.8 X

Return within 5 Years

# TECHNOLOGY ROADMAP





Welcome to your London