Cabify

Business case

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By: Juan Daniel Amézquita

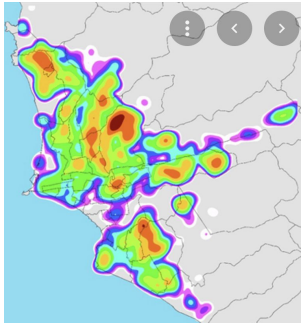
Cabify

1. Business Recommendations

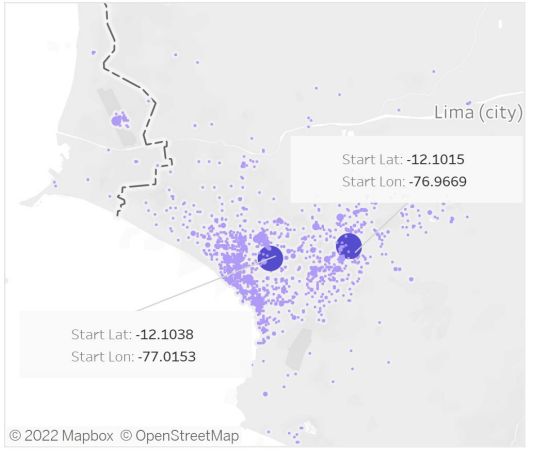
1. Probability chart - incentives

Perhaps one of the biggest challenges is to balance the supply of users with the optimal demand of available drivers in the areas where each service is requested.
To do this, based on the data we have on the busiest areas at each time, we could generate a dynamic heat map for drivers that shows them those areas where they are most likely to find a service.
This probability would be calculated with the forecast of expected services per hour, per zone vs. the number of active drivers in the zone.

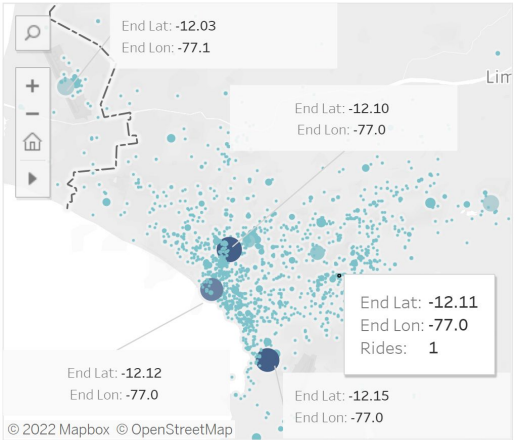
In this way, drivers can be incentivized and guided with data to locate themselves in areas where there is a shortage of cabs.



December - Start Map



December - End Map



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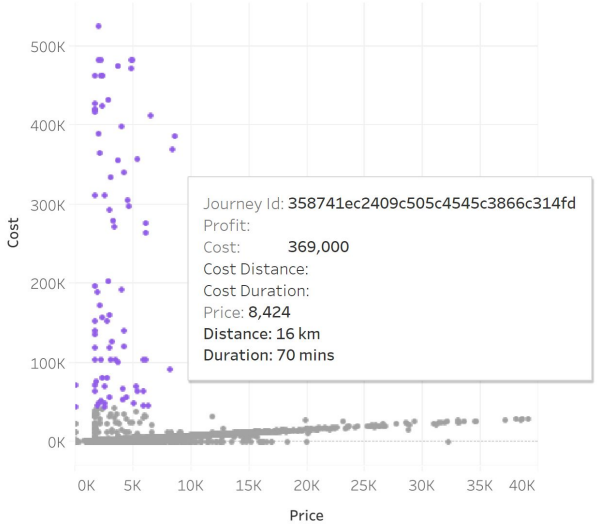
1. Business Recommendations

2. Reduce loses

Hypothesis: There are some journeys with high costs that might be related with accidents

There are some trips that for some strange reason are having very high costs that generate losses. The recommendation is to identify these specific cases why they are occurring and correct this situation.

Several of these do not have a distance or duration cost associated with them, but appear to be additional charges for the service for some specific reason that may be related to accidents. On the other hand, most of these incidents occurred in June and July.



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1. Business Recommendations

3. Cancellations

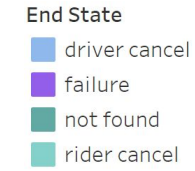
Hypothesis: The riders cancel mostly due the waiting time, which is given for lack of active drivers in the zone

We know that 70% of cancellations are due to the rider canceling the service, which is 17% of the total trips requested. However, it would be good to know why the rider cancels, to try to reduce this cancellation rate.
I recommend creating a pop-up window once the customer cancels with:

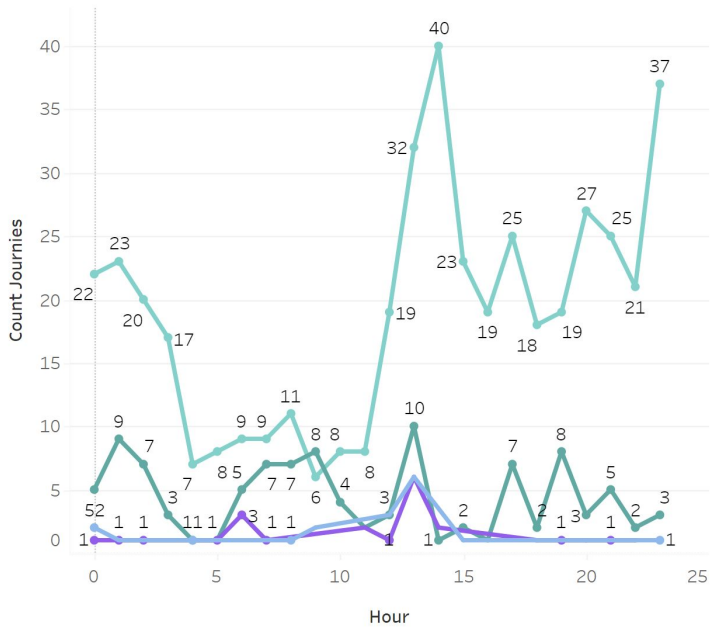
Knowing the rate of cancelled trips due to long waiting time, we can perform an analysis that can help optimize the number of available drivers in a specific area to reduce the cancellation rate. This could result in an 8%-10% increase in the number of monthly trips.

Cancellations

End State	
drop off	75%
rider cancel	17%
not found	5%
driver cancel	1%
failure	1%
no show	0%



Cancellations per hour - November



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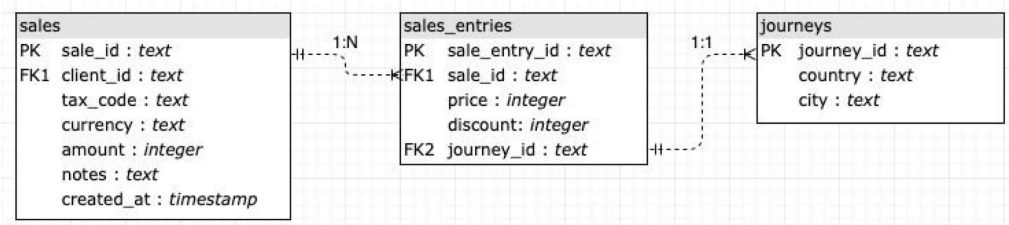
2. SQL Code

HAVING:



1. The total sale amount per month, year, and currency. That amount should be divided by 100 and truncated to one decimal.

```
SELECT
        DATEPART(year, created_at) AS year,
        DATEPART(month, created_at) AS month,
        currency AS currency,
        ROUND(SUM(amount)/100),1) AS total_sales
FROM sales
GROUP BY year, month, currency
ORDER BY year, month ASC
```

2. The total discount per month, year and currency. Excluding data from 2017.

```
SELECT
        DATEPART(year, s.created_at) AS year,
        DATEPART(month, s.created_at) AS month,
        s.currency AS currency,
        ROUND(SUM(se.discount),1) AS discount
FROM sales AS s
LEFT JOIN sales_entries AS se
        ON se.sale_id = s.sale_id
GROUP BY 1, 2, 3
HAVING year != '2017'
ORDER BY 1, 2
```

3. The total sale amount per city and country. Excluding those cities whose sales are lower than 1500.

```
SELECT
        j.country AS country,
        j.city AS city,
        ROUND(SUM(s.amount),1) AS total_sales
FROM sales AS s
LEFT JOIN sales_entries AS se
        ON se.sale_id = s.sale_id
JOIN journies AS j
        ON j.journey_id = se.journey_id
GROUP BY 1, 2
HAVING total_sales > 1500
ORDER BY 3 DESC
```

Annexes - Tableau

Filters

Start Type
All

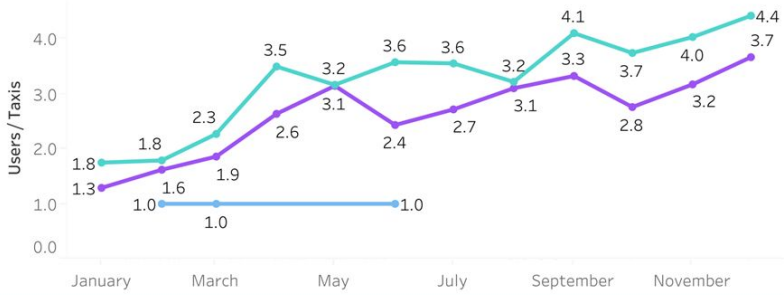
Icon

executive	99%
group	1%
easy	0%

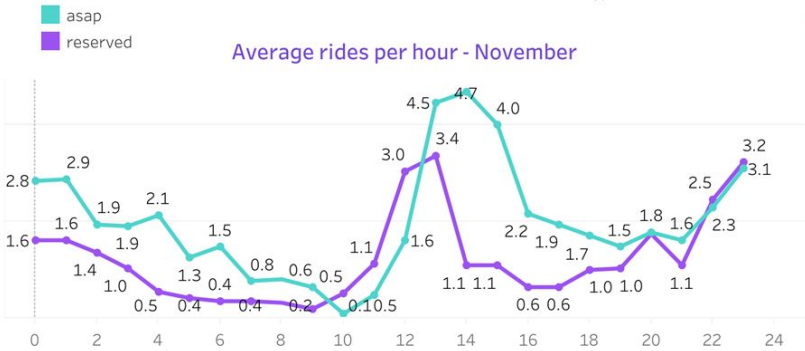
- January
- February
- March
- April
- May
- June
- July
- August
- September
- October
- November
- December

Completed Journies

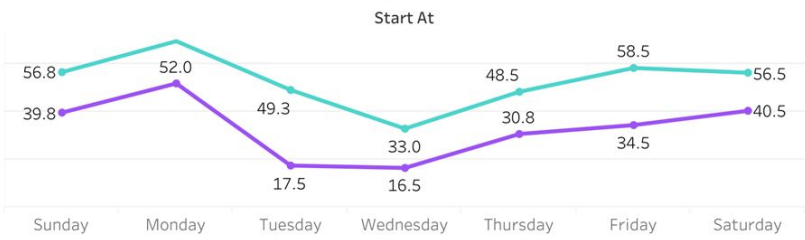
Users / Taxis



Average rides per hour - November

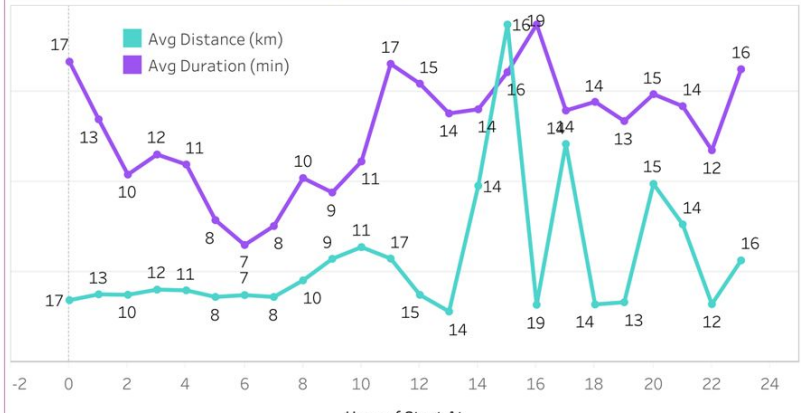


Average rides per day of the week - November



Avg Duration / Distance

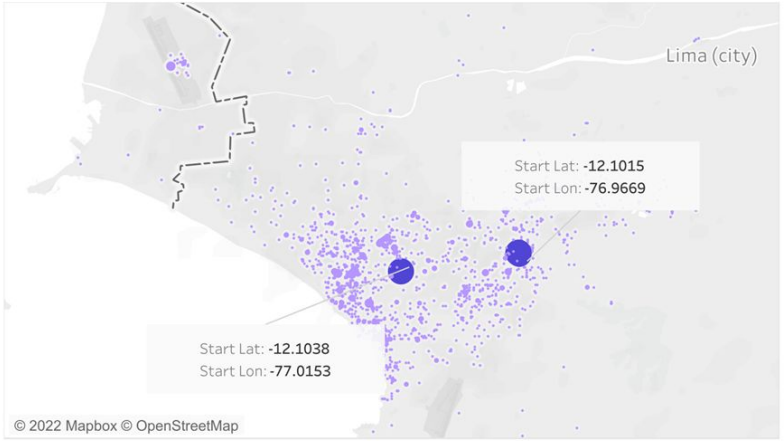
(Excluding outliers)



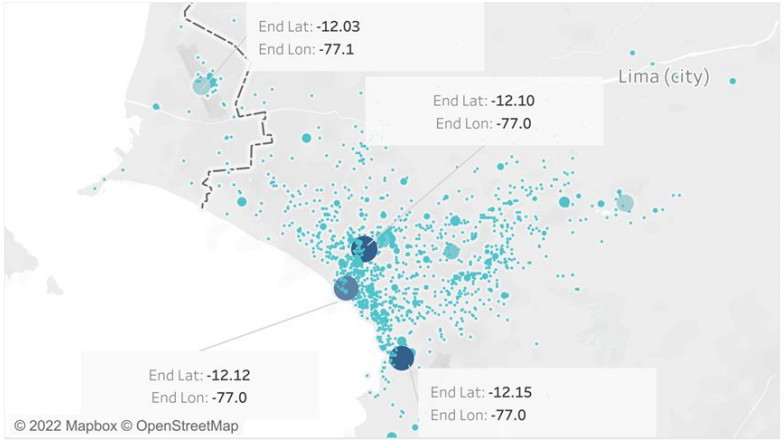
Start At

	Janu..	Febr..	March	April	May	June	July	Augu..	Sept..	Octo..	Nove..	Dece..
Avg Distance (km)	7	33	9	9	9	9	9	9	8	8	33	19
Avg Duration (min)	14	21	18	16	15	15	12	13	12	13	12	14

December - Start Map



December - End Map

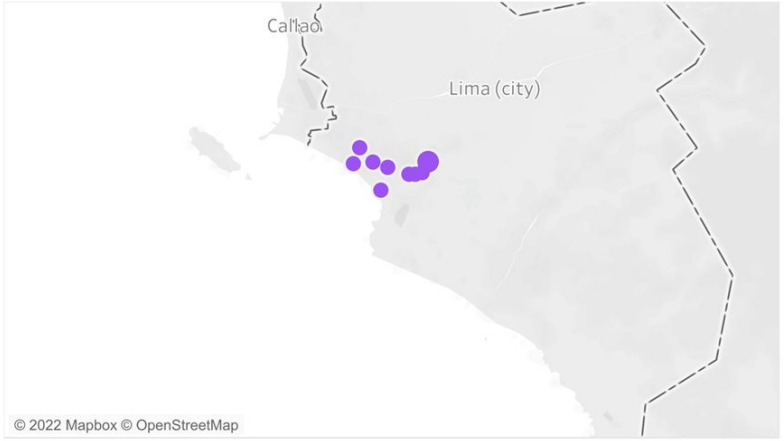


Count Journies

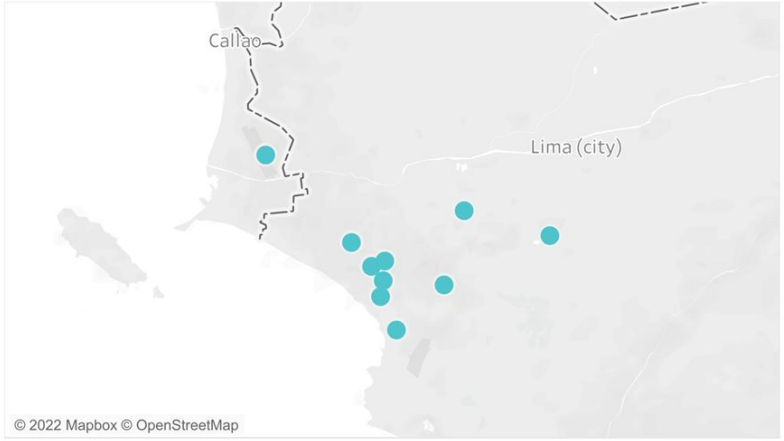
1.0 121.0

- January
- February
- March
- April
- May
- June
- July
- August
- September
- October
- November
- December

December 2 - Start - Hour: 13



December 2 - End - Hour: 13



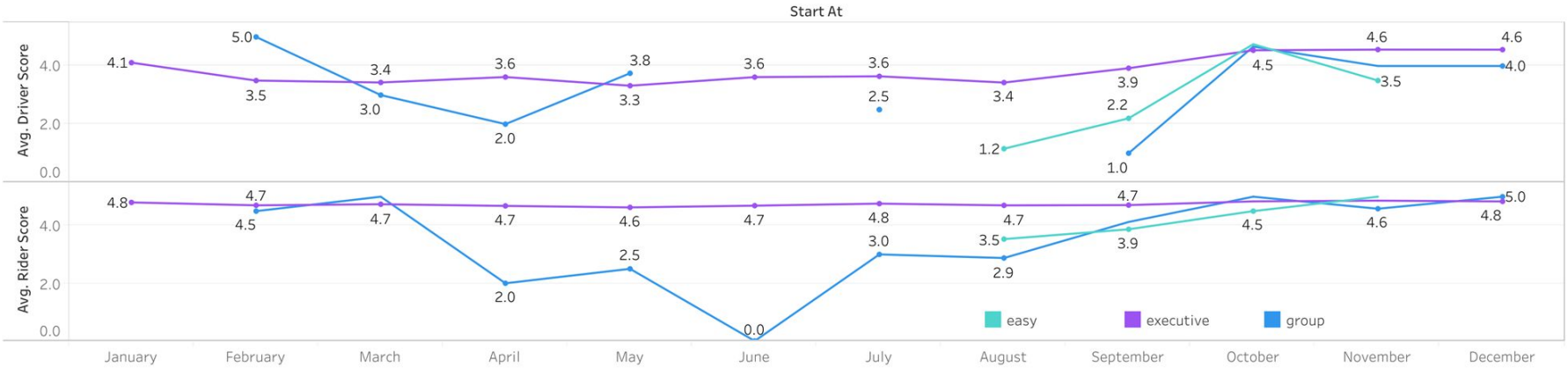
Hour of Start At
13

☐ Show history

Stats:

Avg. Distance	7,936
Avg. Duration	743
Avg. Total Price	$3,173
Count User ID	9
Rides	10

Ratings



Platform

Source	
iPhone	43%
web	35%
Android	19%
iPad	2%
Wap	1%

Icon

Icon	
executive	99%
group	1%
easy	1%

Count Journies
From 687

Avg. Driver Score
0 to 5
and Null values

Cancellations

End State	
drop off	75%
rider cancel	17%
not found	5%
driver cancel	1%
failure	1%
no show	0%

Start Type

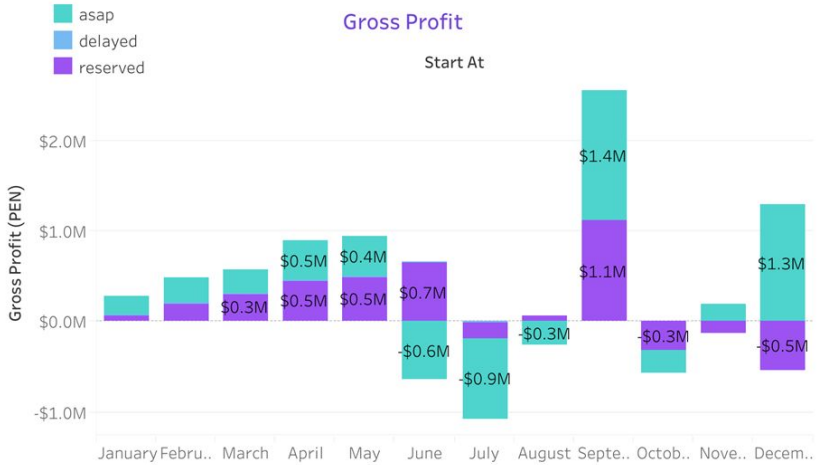
Start Type	
asap	61%
reserved	39%
delayed	0%

Top Drivers

Driver Id	Rides	Score
Null	3,385	
c814db2127582cf95dea1f74f43127c2	1,523	4.2
d665fb9f75ef5d9cd0fd89479380ba78	1,225	3.9
ff5c924e0b630fd7c019a4234059fdf4	1,111	3.8
406921adcca37705ef527b4246c0cfea	1,075	4.0
ec84a73745199ff840ecafcb924383ad	974	3.8
ab581e277813d5d9ff98d03b1c96a13f	865	4.0
406921adcca37705ef527b4246bbbff5	751	3.9

All the values are in PEN

Gross Profit



Price vs Cost

Icon Type (Filter)

Icon	Total Price	Total Cost	Gross Profit
executive	$60.7M	$56.5M	$1.1M
group	$1.6M	$1.2M	$0.4M
easy	$0.2M	$0.1M	$0.1M
Grand Total	**$62.5M**	**$57.8M**	**$1.5M**

Profitability

	Start At											
	January	February	March	April	May	June	July	August	September	October	November	December
Price	$1.4M	$2.3M	$2.9M	$3.9M	$4.1M	$5.5M	$4.3M	$5.5M	$6.2M	$8.3M	$8.5M	$9.1M
Cost	$1.1M	$1.8M	$2.3M	$3.0M	$3.2M	$5.4M	$5.4M	$5.5M	$3.7M	$8.9M	$8.4M	$8.4M
Gross. Profit	$0.3M	$0.5M	$0.6M	$0.9M	$0.9M	$0.0M	-$1.1M	$0.0M	$2.5M	-$0.6M	$0.0M	$0.7M
G. Margin %	21%	21%	20%	23%	23%	1%	-25%	-1%	41%	-8%	1%	8%

Profit per ride