CASE STUDY
#01 LYFT

STEP BY STEP

1. THE CASE
2. STUDYING LYFT
3. ANALYSING DATA
4. CHOOSING QUESTIONS
5. PROPOSING A SOLUTION

THE CASE

WHO AM I?

I'AM THE PRICING PRODUCT MANAGER FOR LYFT'S RIDE-SCHEDULING FEATURE, AND I´M LAUNCHING A NEW CITY.
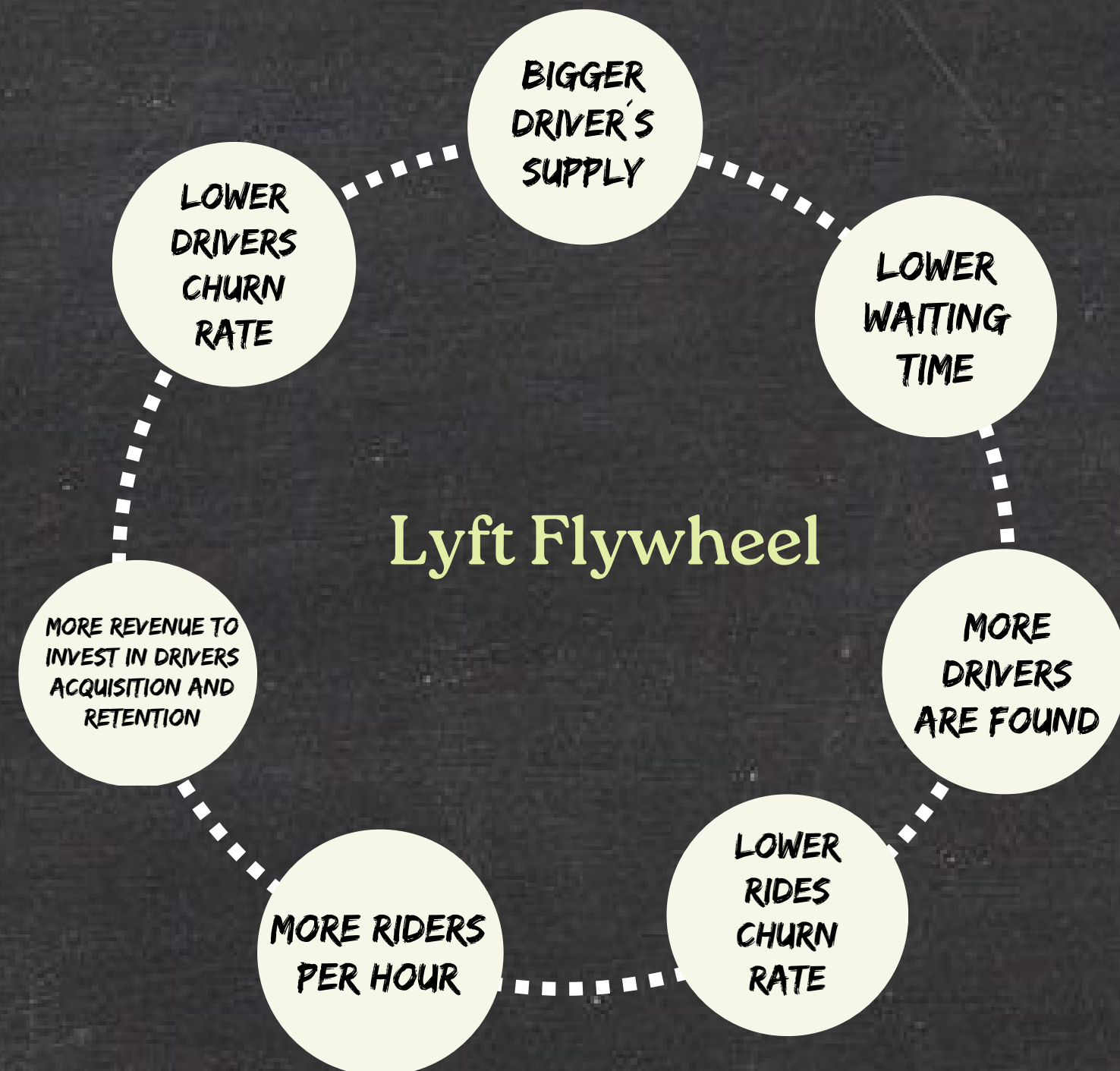
GOAL

TO MAXIMIZE NET REVENUE FOR THE NEXT 12 MONTHS ON THE ROUTE AIRPORT-DOWNTOWN

CORE QUESTION

HOW MUCH MORE OR LESS DO I PAY DRIVERS PER TRIP BY CHANGING LYFT´S TAKE , ASSUMING I CANNOT CHARGE RIDERS MORE THAN THE PREVAILING RATE?

STUDYING LIFT

Lyft Flywheel

- BIGGER DRIVER'S SUPPLY
- LOWER WAITING TIME
- MORE DRIVERS ARE FOUND
- LOWER RIDES CHURN RATE
- MORE RIDERS PER HOUR
- MORE REVENUE TO INVEST IN DRIVERS ACQUISITION AND RETENTION
- LOWER DRIVERS CHURN RATE

WHY TO STUDY LYFT APP
CLIPBOARD'S MARKETPLACE HAS MECHANICS SIMILAR TO LYFT'S RIDE-SCHEDULING BUSINESS, SINCE CLIBOARD USERS ALSO "BOOK A TRANSACTION IN THE FUTURE."

LYFT BUSINESS MODEL CANVAS

BUSINESS MODEL

TWO SIDED-MARKETPLACE BETWEEN DRIVERS AND RIDERS

THE COMPANY OFFERS RIDE SHARING, BIKES AND SCOOTERS RENTAL, ACCESS TO AUTONOMOUS VEHICLES AND PROVISION OF TRANSPORTATION OPTIONS THROUGH PLATFORM AND MOBILE-BASED APPLICATIONS.

CUSTOMER SEGMENTS

RIDERS
- PEOPLE WITHOUT A CAR
- THOSE WHO DON'T WANT TO DRIVE
- PEOPLE WHO LOVE TO MAKE NEW FRIENDS WHILE TRAVELING
- PEOPLE SEEKING AN AFFORDABLE RIDE SERVICE FROM THEIR DOORSTEP

DRIVERS
- PEOPLE WHO HAVE A VEHICLE AND WANT TO MAKE MONEY
- PEOPLE WHO LOVE TO DRIVE
- THOSE LOOKING FOR A PART-TIME OR FULL-TIME JOB WITH A FLEXIBLE SCHEDULE

VALUE PROPOSITION

RIDERS
- MINIMUM WAITING TIME
- A FEELING OF FAFETY AND COMFORT
- A WIDER RANGE OF OPTIONS FOR A RIDE
- ECONOMICAL RIDES

DRIVERS
- A SOURCE OF INCOME
- FLEXBIBLE WORKING SCHEDULE
- QUICK PAYOUT SYSTEM
- EXTENSIVE SUPPORT VIA DIFFERENT PROGRAMS

CUSTOMER RELATIONSHIP

SOCIAL MEDIA
CUSTOMER SUPPORT
REVIEWS/RATING/FEEDBACK

CHANNELS

APP
WEBSITE

REVENUE STREAMS
- COMISSION-BASED REVENUE MODEL
- SURGE PRICING REVENUE MODEL
- SUBSCRIPTION – BASED REVENUE MODEL (LIFT PINK))
- MULTIMODAL BUSINESS MODEL ((BIKES AND SCOOTER, PUBLIC TRANSIT, RIDESHARING MARKETPLACE, AUTONOMUS VEHICLES)

COST STRUCTURE

TECHNOLOGICAL INFRAESTRUCTURE
SALARIES TO PERMANENT EMPLOYEES
PAYOUT TO DRIVERS
MARKETING
INSURANCE COSTS

KEY ACTIVITIES

PRODUCT DEVELOPMENT AND MANAGEMENT
MARKET AND COSTUMER ACQUISITION
DRIVERS BACKGROUND CHECK
MANAGING DRIVERS PAYOUTS
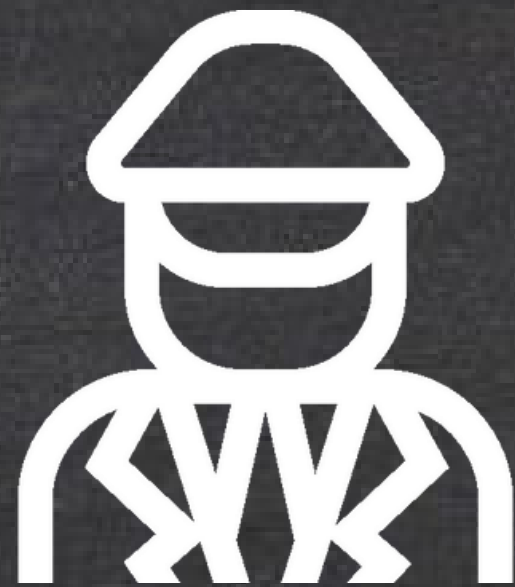CUSTOMER SUPPORT

ANALYSING DATA

1. DRIVER
2. RIDER
3. RIDES
4. RIDERS CHURN RATE
5. DRIVERS CHURN RATE

DRIVER

- ASSUMING A CONSTANT CAC
- ASSUMING A CHANGE IN THE CHURN RATE AND IN THE RIDERS/MONTH IF THE PREVAILING WAGE CHANGES

LYFT´S TAKE	CAC	CHURN RATE DRIVER	RIDES/MONTH
$6	$500	5%	100
$3	$500	?	?

RIDER

CAC	CHURN RATE RIDERS	RIDES MONTH AVERAGE
$10 TO $20	**10%** (ALWAYS FOUND A DRIVER)	1
	33% (FAILED TO FIND DRIVER)	
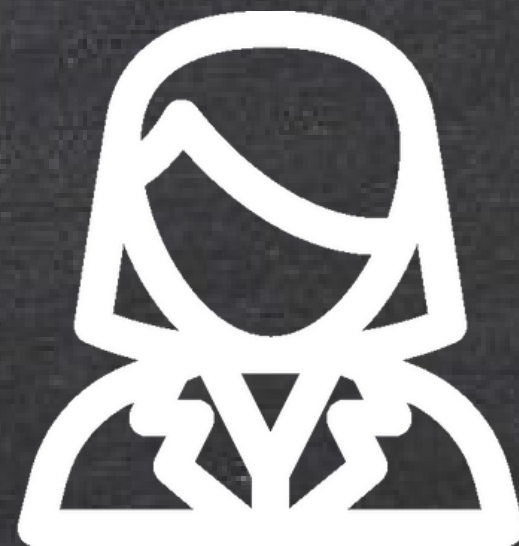
ASSUMING THAT THE RIDERS CHURN RATE PERCENTAGE AND THE AVERAGE RIDERS/MONTH IS CONSTANT

RIDES

RIDES COST	LYFT'S TAKE	MATCH RATES
$25	$6	60%
	$3	93%

RIDERS CHURN RATE

LYFT'S TAKE	EXPERIENCE	RIDES	MATCH RATE	RIDER'S CHURN	RIDERS LOST	ACTIVE RIDERS	TOTAL RIDER'S STAYED	TOTAL RIDER'S LOST
6$	FOUND A DRIVER	100	60%	10%	6	54	80,8	19,20
	FAILED TO FIND DRIVER		40%	30%	13.2	26,8		
3$	FOUND A DRIVER	100	93%	10%	9.3	83,7	88,39	11,61
	FAILED TO FIND DRIVER		7%	30%	2.31	4,69		

LYFT TAKE OF 6$
100 – 19,2 = 80.80
LYFT TAKE OF 3$
100 – 11,61 = 88.39

Reducing Lyft´s take from 6/ride to 3/ride increased the match rates from 60% to 93%, which means that, although riders churn maintained in a steady rate of 10% monthly (for riders who don´t experienced a failed to find a driver) and 33% monthly (for riders who did experienced a failure), the number of riders lost in a month decreased from 19,20% to 11,61%.

IF MATCH RATES IN THE PRICING EXPERIMENT ROSE FROM 60% TO ROUGHLY 93%, IT HAD AN INCREASE OF 55%. THE CASE ALSO STRESSES THAT THE GROWTH HAPPEND ALMOST INSTANTLY.

THEREFORE, WE CAN ASSUME THAT THE ELEVATION OF MATCH RATES WAS CAUSED BY THE DECREASE OF DRIVERS CHURN RATE AND NOT BECAUSE OF THE ACQUISITION OF NEW DRIVERS.

DRIVERS CHURN RATE

LYFT´S TAKE	CAC	CHURN RATE DRIVER	RIDES/MONTH
$6	$500	5%	100
$3	$500	2,25%	155

ASSUMING THAT THE DRIVERS CHURN RATE IS INVERSELY PROPORTIONAL TO RIDERS MATCH RATES, THE DRIVERS CHURN RATE WITH LYFT´S TAKE OF $3/RIDE WAS 2,25% .

ALSO, IF THE DRIVERS COMPLETE 100 RIDES/MONTH WITH LYFT´S TAKE OF $6, WE CAN ASSUME THAT THEY WILL COMPLETE 155 RIDES/MONTH WITH LYFT´S TAKE OF $3.

CHOOSING QUESTIONS

A) HOW MUCH PROFIT ONE DRIVER GIVES TO THE COMPANY IN ONE YEAR WITH LYFT´S TAKE OF $3 AND $6?

B) HOW MUCH PROFIT 100 DRIVERS GIVES TO THE COMPANY – CONSIDERING DRIVERS CHURN RATE – WITH LYFT´S TAKE OF $3 AND $6?

HOW MUCH PROFIT DOES ONE DRIVER GIVES TO THE COMPANY IN ONE YEAR WITH LYFT´S TAKE OF $3 AND $6?

WHAT WE ARE TAKING INTO ACCOUNT:

A) LYFT´S TAKE IN ONE YEAR BEFORE ANY DESCOUNTS = LYFT´S GROSS REVENUE

B) RIDERS LOST IN THE SECOND MONTH DUE TO THE CHURN RATE

C) THE COST OF ACQUISITION OF NEW RIDERS TO REPLACE THE LOST ONES

LYFT`S TAKE OF $6 – 1 DRIVER – 100 RIDERS

LYFT`S TAKE OF $3 – 1 DRIVER – 155 RIDERS

SINCE LYFT IS NOT STARTING ITS BUSINESS, WE ARE ASSUMING THAT THE DRIVER HAD ALREADY BEEN ACQUIRED BY THE COMPANY IN THE BEGGINING OF THE YEAR – THIS DRIVER´S CAC WAS NOT PART OF THE MATH

LYFT'S TAKE PER DRIVER

IN THE MONTH

DRIVER X RIDES X LYFT'S TAKE

1 X 100 X $6 = $600

1 X 155 X $3 = $465

IN THE YEAR

GROSS RENEVUE X MONTHS

$600 X 12 = $7200

$465 X 12 = $5580

RIDERS LOST IN THE SECOND MONTH

TAKE	JAN	FEB	DRIVERS LOST
6$	100 DRIVERS	80,8 DRIVERS	19,20
3$	155 DRIVER	137 DRIVERS	18

LYFT`S TAKE OF $6 – RIDERS CHURN RATE 5%
LYFT`S TAKE OF $3 – RIDERS CHURN RATE 2,25%

ASSUMING THAT EACH DRIVER STARTS THE PERIOD WITH 100 RIDERS (LYFT´S TAKE OF $6) AND 155 RIDERS (LYFT´S TAKE OF $3), WE CAN THEN APPLY THE RIDERS CHURN RATE OF 5% AND 2,25% AND CALCULATE HOW MANY DRIVERS WERE LOST IN THE SECOND MONTH.

THE COST OF ACQUISITION OF NEW RIDERS TO REPLACE THE LOST ONES

NEW RIDERS NEXT MONTH

LYFT TAKE OF 6$

19.2 X 15$ = $288

LYFT TAKE OF 3$

18 X 15$ = $270

CAC RIDER: 10$ TO 20$
(10$+20$)/2 = AVERAGE OF 15$

AFTER ONE MONTH, DUE TO OUR CHURN RATE, WE ARE GOING TO LOOSE SOME RIDERS.
FOR THIS DRIVER KEEP HAVING HIS TOTAL AMOUNT OF RIDERS, WE WILL NEED TO GET NEW RIDERS TO FILL THE GAP THAT WE LOST.
THEN, WE WILL MULTIPLY THE NUMBER OF DRIVERS LOST IN EACH LYFT´S TAKE BY THE AVERAGE COST OF CAC RIDERS, AND THEN MULTIPLY IT FOR 11 (TO HAVE A COMPLETE A YEAR)

THE RESULT = HOW MUCH PROFIT DOES ONE DRIVER GIVES TO THE COMPANY IN ONE YEAR WITH LYFT´S TAKE OF $3 AND $6?

LYFT´S GROSS REVENUE FOR ONE DRIVER- (RIDERS LOST IN THE SECOND MONTH X AVERAGE OF RIDERS CAC X 11)

LYFT´S TAKE $6 –

$7200 – ($288,00 X 11)

$7200 – $3168,00 = $4.032,00

LYFT´S TAKE 3 –

$3600 – ($270,00 X 11)

$3600 – $2970 = $2.610,00

WHAT NOW?

WELL, WITH THIS MATH I COULD SEE THAT, EVEN THOUGH LYFT´S TAKE OF $3 INCREASED THE MATCH RATES BETWEEN DRIVERS AND RIDERS AND PRESUMABLY DECREASED THE MONTLHY CHURN RATE OF DRIVERS AND ENCOURAGED DRIVERS TO TAKE MORE TRIPS, IT WAS NOT SUFFICIENT TO MAXIMIZE LYFT´S NET REVENUE.

HOWEVER, A DOUBT REMAINS: THE SITUATION WOULD CHANGE IF I ESCALATED THE NUMBER OF DRIVERS TO 100 DRIVERS AND TAKE INTO ACCOUNT DRIVERS CHURN RATE AS WELL?

THAT IS WHY I DECIDED TO MAKE MY SECOND QUESTION: HOW MUCH PROFIT 100 DRIVERS GIVES TO THE COMPANY – CONSIDERING DRIVERS CHURN RATE – WITH LYFT´S TAKE OF $3 AND $6?

HOW MUCH PROFIT 100 DRIVERS GIVES TO THE COMPANY – CONSIDERING DRIVERS CHURN RATE – WITH LYFT´S TAKE OF $3 AND $6?

STEP BY STEP:

A) FIND LYFT´S NET REVENUE PER DRIVER/MONTH

B) MULTIPLY BY 100 TO KNOW LYFT´S NET REVENUE/MONTH FOR 100 DRIVERS

C) APPLY DRIVERS CHURN RATE AND FIND DRIVERS LOST IN THE SECOND MONTH

D) MULTIPLY FOR THE NECESSARY COSTS OF ACQUIRING NEW DRIVERS (IN ORDER TO MAINTAIN 100 DRIVERS).

E) MULTIPLY FOR 11 TO KNOW DRIVER´S CAC FOR THE WHOLE YEAR IN ORDER TO MAINTAIN 100 DRIVERS

FIND LYFT´S NET REVENUE PER DRIVER/MONTH AND 100 DRIVERS/MONTH

LYFT´S GROSS REVENUE A YEAR PER DRIVER	RIDERS LOST IN THE SECOND MONTH X AVERAGE OF RIDERS CAC X 11	LYFT´S NET REVENUE A YEAR PER DRIVER	LYFT´S NET REVENUE PER DRIVER/MONTH	LYFT´S NET REVENUE 100 DRIVERS/MONTH
7200	3168	4032	336,00	33600,00
5580	2970	2610	217,50	21700,50

REMEMBERING:
LYFT´S GROSS REVENUE A YEAR/DRIVER – RIDERS LOST IN THE SECOND MONTH X AVERAGE OF RIDERS CAC X 11 = LYFT´S NET REVENUE YEAR/DRIVER

APPLY DRIVERS CHURN RATE AND FIND DRIVERS LOST IN THE SECOND MONTH

NOW, WE APPLIED DRIVERS CHURN RATE (OF 5% OR 2,25%, DEPENDIND ON THE LYFT´S TAKE) AND FIND OUT THE NUMBER OF DRIVERS AFTER CHURN RATE.

WE ALSO MULTIPLIED THE NUMBER OF DRIVERS LOST IN THE SECOND MONTH FOR THE NECESSARY COSTS OF ACQUIRING NEW DRIVERS (IN ORDER TO MAINTAIN 100 DRIVERS). THE COST OF ACQUISITION OF NEW DRIVERS WILL BE SPENT MONTHLY.

LYFT´S TAKE	CAC	CHURN RATE DRIVER	DRIVERS IN THE FIRST MONTH	DRIVERS AFTER CHURN RATE (SECOND MONTH)	MONTHLY CAC TO KEEP 100 DRIVERS
$6	$500	5%	100	95	2500,00
$3	$500	2,25%	100	97,75	1125,00

$403.200,00 – $27.500,00 = $375.700,00

Months	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Dec	TOTAL
DRIVERS	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	–
LYF'S REVENUE PER DRIVER/MONTH	$336,00	$336,00	$336,00	$336,00	$336,00	$336,00	$336,00	$336,00	$336,00	$336,00	$336,00	$336,00	–
LYFT REVENUE 100 DRIVERS/MONTH	$33.600,00	$33.600,00	$33.600,00	$33.600,00	$33.600,00	$33.600,00	$33.600,00	$33.600,00	$33.600,00	$33.600,00	$33.600,00	$33.600,00	$403.200,00
DRIVERS AFTER CHURN	0	95,00	95,00	95,00	95,00	95,00	95,00	95,00	95,00	95,00	95,00	95,00	–
NEW DRIVERS	0	5	5	5	5	5	5	5	5	5	5	5	–
COST NEW DRIVERS	$0,00	$2500,00	$2500,00	$2500,00	$2500,00	$2500,00	$2500,00	$2500,00	$2500,00	$2500,00	$2500,00	$2500,00	$27.500,00

$261.000,00 – $12.375,00 = $248.625,00,00

Months	Jan	Feb	Mar	Apr	May	Jun	July	Aug	Sep	Oct	Nov	Dec	TOTAL
DRIVERS	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	100,00	–
LYF'S REVENUE PER DRIVER/MONTH	$217,50	$217,50	$217,50	$217,50	$217,50	$217,50	$217,50	$217,50	$217,50	$217,50	$217,50	$217,50	–
LYFT REVENUE 100 DRIVERS/MONTH	$21.750,00	$21.750,00	$21.750,00	$21.750,00	$21.750,00	$21.750,00	$21.750,00	$21.750,00	$21.750,00	$21.750,00	$21.750,00	$21.750,00	$261.000,00
DRIVERS AFTER CHURN		97,75	97,75	97,75	97,75	97,75	97,75	97,75	97,75	97,75	97,75	97,75	–
NEW DRIVERS		2,25	2,25	2,25	2,25	2,25	2,25	2,25	2,25	2,25	2,25	2,25	–
COST NEW DRIVERS		$1125,00	$1125,00	$1125,00	$1125,00	$1125,00	$1125,00	$1125,00	$1125,00	$1125,00	$1125,00	$1125,00	$12.375,00

HOW MUCH PROFIT 100 DRIVERS GIVES TO THE COMPANY – CONSIDERING DRIVERS CHURN RATE – WITH LYFT´S TAKE OF $3 AND $6?

LYFT´S TAKE $6 –

$403.200,00 – $27.500,00 = $375.700,00

LYFT´S TAKE $3 –

$261.000,00 – $12.375,00 = $248.625,00,00

PROPOSING A SOLUTION

AFTER STUDYING THE CASE AND ANALYZING THE SELF- PROPOSED QUESTIONS, I CONCLUDED THAT THE REDUCING IN LYFT´S TAKE POSITIVELY AFFECTED THE MATCH RATES, AS WELL AS IT HAD A BENEFICIAL IMPACT ON DRIVER´S CHURN RATE.

THESE POSITIVE EFFECTS HELPED TO REDUCE THE NEGATIVE IMPACT ON THE COMPANY'S NET REVENUE. AFTER ALL, EVEN THOUGH THE DROP IN LYFT´S TAKE WAS 50%, THE DROP IN NET REVENUE DID NOT COME CLOSE TO THIS.

THERE IS ALSO A POSSIBILITY THAT THE INCREASE IN DRIVER´S WAGE MAY HAVE LOWERED THE DRIVER'S CAC, BUT THIS INFORMATION WAS NOT PART OF THE CASE, REASON WHY THE CAC WAS CONSIDERED CONSTANT IN BOTH LYFT´S TAKES.

<u>EVEN SO, WITH THE DATA PROVIDED, IT IS MORE PROFITABLE FOR THE COMPANY TO KEEP WITH LYFT´S TAKE OF $6 WITH REGARD TO MAXIMIZE NET REVENUE.</u>

PS: WITH THE INFORMATION I HAD AND THE ONLY PRICING EXPERIMENT MADE, I COULDN´T ANALYSE THE BEHAVIOUR OF DRIVERS AND RIDERS WITH OTHER RATES.