

HAVE A LIFE TO HAVE MORE TIME



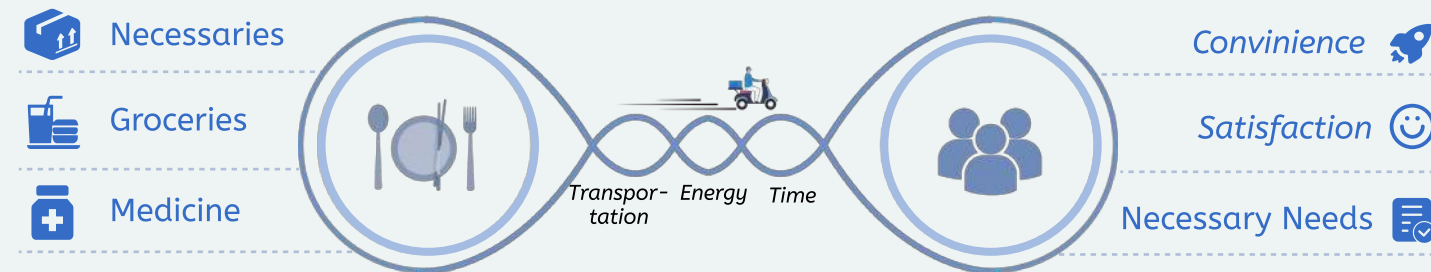
DATE:
AUG. 2022- OCT. 2022

PROJECT TYPE:
UI/UX, SYSTEM DESIGN

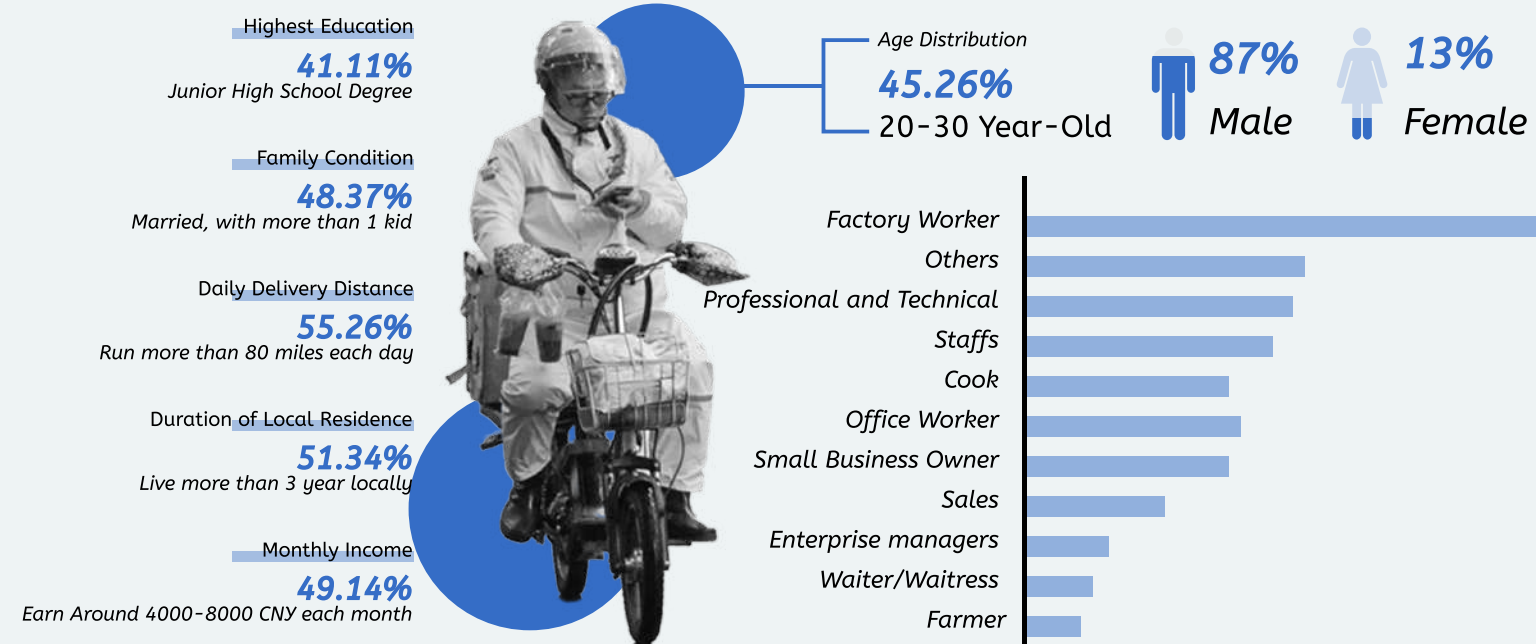
BACKGROUND

As an important role in connecting businesses and customers, delivery riders are responsible for sending the meals prepared by businesses to the corresponding ordering customers. They play the role of "serving food" in the new era system and are an indispensable member of the delivery industry. The social role of the delivery rider has become even more important during the pandemic as people have cut back on restaurant visits.

Customers place orders with merchants through the delivery platform, and merchants will hang the delivery task on the delivery platform for riders to grab orders. If no one receives the order, the merchant can transfer the single to the platform or require the platform to force the rider to send the order. After receiving the order, the rider picks up and delivers the food according to the route planned by the big data of the delivery platform.



PERSONA



RELATED NEWS

People's living style changes in the past few years due to the Cobid-19 pandemic, which lead to the rising number of food delivery services. Meanwhile, the traffic safety event which related to the food delivery man are rising sheerly. Here is some related reports:



COMMENT

Pls follow the traffic regulations and wear helmet!!! Be responsibility of yourself!!!

I feel so guilty that a delivery rider got in a car accident when he sending my delivery.

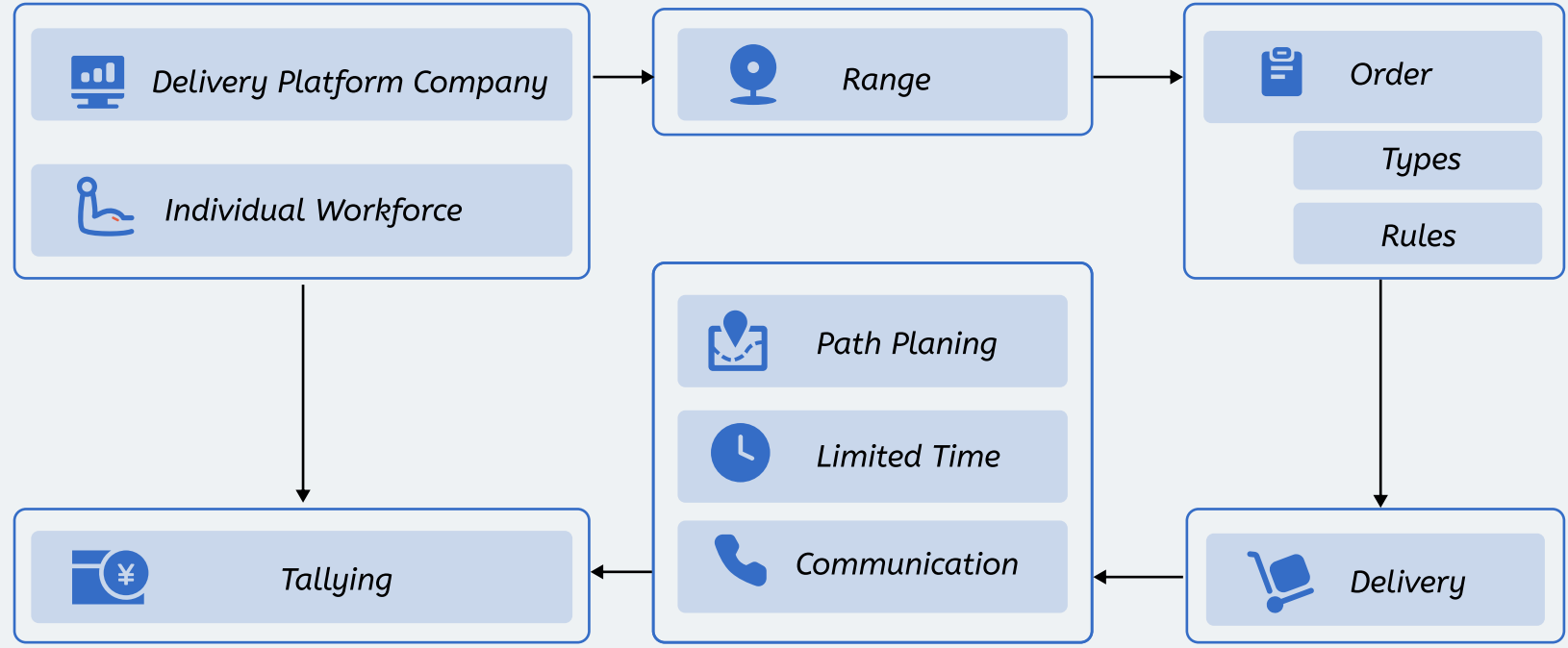
I feel sorry when I heard this kind of News, but I am angry when I was driving and see some of them rampage across the street.

The delivery man's delivery time is unreasonable!!! It urge them to overspeed and thread others' safety and lives.

The Food delivery man and food delivery platform know nothing about the traffic regulations. The Food delivery man crashed me and make me hurted. My holiday was ruined by them!!!

So we think it is normal that the delivery people are crazy about speed, and they customize very strict speed management for them, which leads to them running red lights, cutting paths, frequent traffic accidents, and getting no compensation when they die? That is Ridiculous!!!

WORKING MODE



Income sturcture of Food Delivery man is single, Part-time Delivery income count for each other, while Full-time delivery man income was counted as basic income+royalties. Income of each order are comes from Delivery Distance and Delivery Time. However, Food Delivery order are concentrated on luch time and dinner time, which means Food Delivery man should do as many orders as he can in a whort limited time for more income.

距离收费

0.0-3.0公里，收起步价3.15元

Distance Price:

0.0-3.0km, charge ¥ 3.15 for Starting Price

3.0km and above, charge each ¥ 0.2 for per 0.1 km

收费基数=商品小计-商家活动支出

Price for Charge

Charging Base=Merchandise Subtotal- Merchant activity expenditure

20元以上，每上收1元加收0.13元

Charging Base Range

¥ 0-20, Charge ¥ 0

¥ 20 and above, Charge each 0.13 for extra per ¥ 1

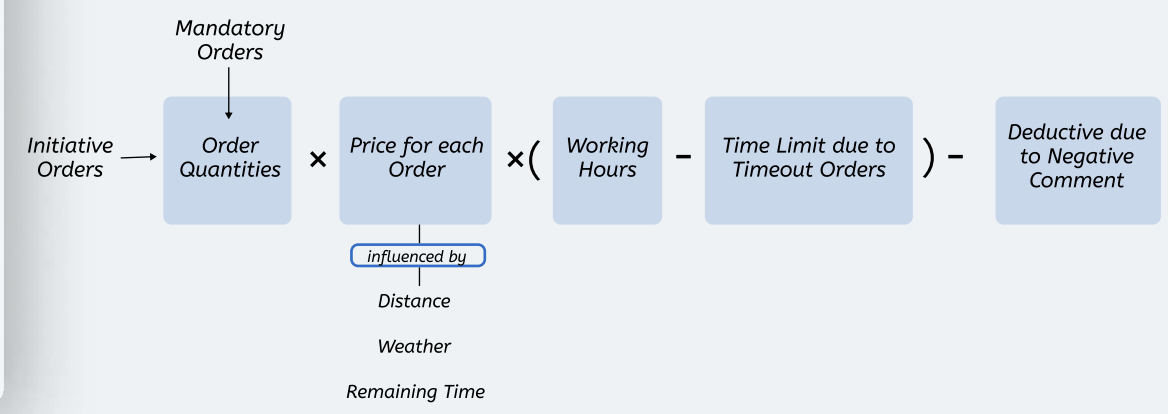
00:00-03:00: 每单加收1元

Extra Charge for Special Time

03:00-06:00, Charge Extra ¥ 1.0 for per order

06:00-21:00, Charge Extra ¥ 0.5 for per order

21:00-24:00, Charge Extra ¥ 0.5 for per order



DELIVERY KEY POINT



TRICK 1 Take a few more ride in the city

✓ Get a better understanding of the traffics in the city, since experienceby their own.

✗ Low Efficiency, usually take 2-3 months to learn the local traffic condition



TRICK 2 Take some training course of the platform

✓ Can easily learn some useful techniques, and avoid some freshman's mistakes

✗ Possible to learn bad habits, such as running red lights



TRICK 3 Learn From Other Colleages

✓ Can easily learn some useful techniques, and avoid some freshman's mistakes

✗ Possible to learn bad habits, such as running red lights



TRICK 4 OverSpeed/ Taking short cut

✓ Eaily Improve the delivery efficiency and same times

✗ Have risks of geting traffic accidents

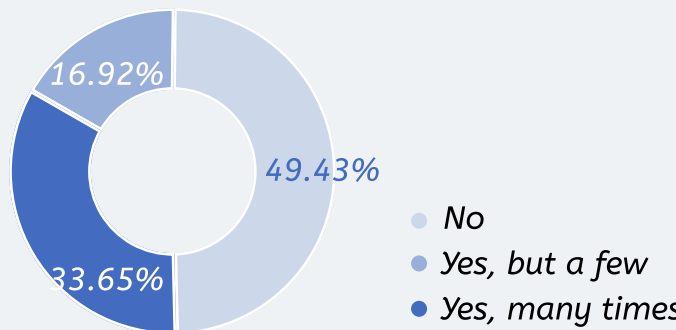
DESIGN INSIGHT

The platform only makes settlement based on whether the delivery time of each order is over time and whether each order is evaluated poorly. The evaluation standard is basically the length of delivery time, which is too simple, so riders have to compress all the time to the extreme. Even if they are very aware of the importance of traffic safety, but in the race against time delivery, this problem is often arranged after the risk of "overtime" and "poor evaluation", thus increasing the complexity and danger of urban road traffic. For these reasons, I wanted to dig deeper into this group and find out why they would die for money.

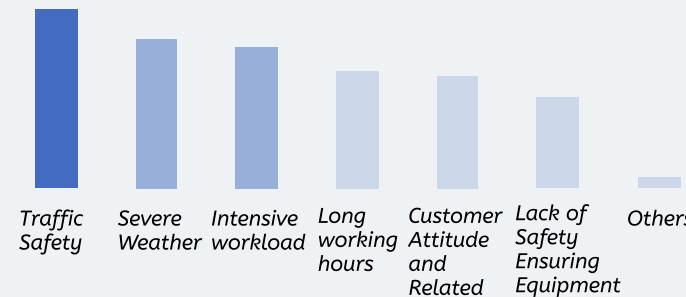
USER RESEARCH-DELIVERY MAN

According to Xinhuanet Questionnaires, food delivery riders very clear that traffic safety risk is the major thread to their personal safety and career killer.

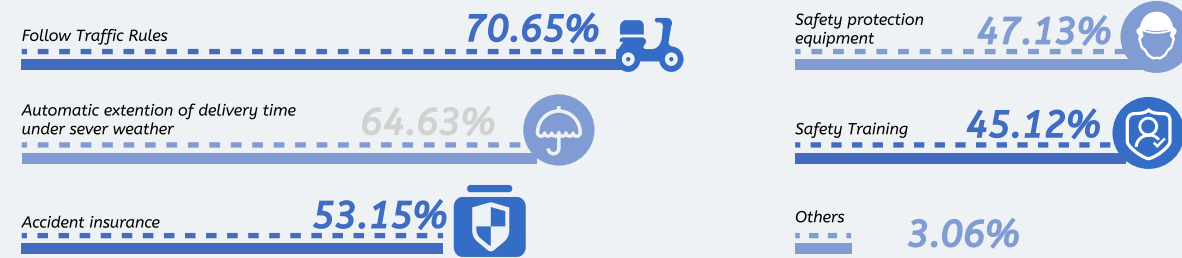
FOOD DELIVERY MAN’S TRAFFIC VIOLATIONS IN LAST WEEK



MAJOR CHALLENGE IN FOOD DELIVERY MAN’S JOB

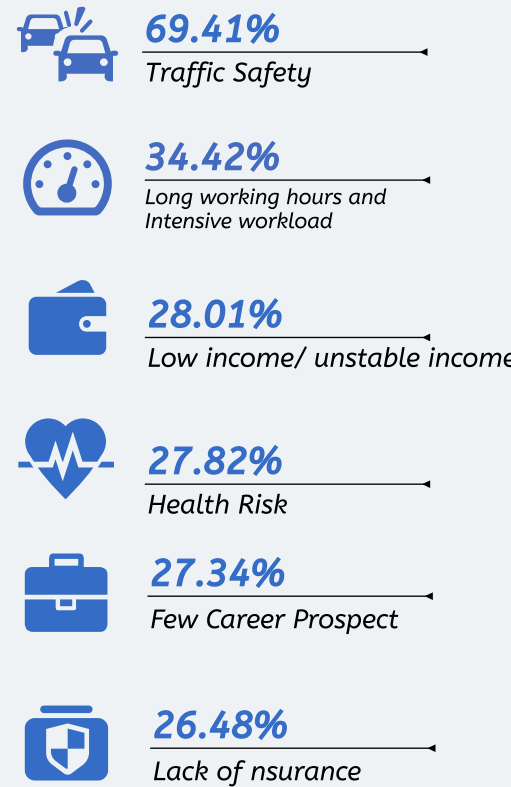


MAJOR CHALLENGE IN FOOD DELIVERY MAN’S JOB



Nearly seventy percent of the them consider their major concern of work, necessary security measures and career’s biggest challenge are traffic safety problems. However, still, in the latest week, more than half of the Food delivery riders have violated the traffic regulations

FOOD DELIVERY MAN’S TRAFFIC VIOLATIONS IN LAST WEEK



ONLINE INTERVIEW

I am native Beijings, now takeout condition is not so good. The electric bicycles don't have enough speed and persistence. Motorcycle is more embarrassing: A license plate is able to ride whatever you want but cost more than 300,000, while B license can not enter the the downtown districts. If you live inside the fourth Ring Road and want to legally ride a motorcycle, there is only one option for 300,000 RMB...

So now it is a deadlock that everytime traffic police check our permit is illegle. We argued that our livelihood ishard and they persuade us that “though you are working hard but you have to pay attention to safety” ah ~ while giving you a ticket or your car

It sounds like they cares about you, but it's obviously killing someone...



Little Wang
32 year-old
Food Delivery Driver



Peng Yu
30 year-old
Female Delivery Driver

Freedom and Sense of accomplishment. I am a female rider work engaged in take-out industry for more than a year. In the morning, turn on my positioning, pick orders, and send orders. 3 PM I can eat a meal, if that(the market) is busy I have been run again, if not go home cooking, take a rest in the afternoon. Around 4-5 p.m., set off again, probably to send to 2a.m. or later. Due to the impact of the epidemic, the work will be finished around nine o'clock. Sometimes I run more than 70 or 80 orders a day, while sometimes less than 40, earning about ¥ 10,000 a month. I used to feel so hard at work and waiting to get off work every minute when staying in the office. However, after becoming a food delivery rider, I never tried working.



Hao
24 year-old
Food Delivery Driver

Tread carefully into some trap. New proposal to run specially sent, be careful not to be cheated by agents. Agents sometimes deduct your unit price. Don't rent a battery car. It is a lead-drilled battery root, which is not worth four or five thousand yuan at all. Novice without money, the proposal to buy a second-hand battery car. My company went bankrupt, so I must engage in food delivery work to repay my debts. I've been doing this for two months.

If you want to enter this industry, remember to be familiar with the local road address. Otherwise, it will take a month or two to get familiar with. Don't think that mobile navigation apps can solve all the problems. In some small towns, you will find that the GPS is not reliable.

Fortunately, I have thick skin, do not know the address I grabbed the old staff to ask. I don't like to send the rich area, the rich area of a district many do not let the motorcycles get into, while the district is large, takes twenty minutes to walk in. One such order out of five or six will be gone in 20 minutes, and the rest will basically be overtime.

IN-PERSON INTERVIEW

1. How long have you been a delivery rider? How are you earning?
2. How many years you have stay in the city? Are you married? Are there any children at home?
3. How important is the number of orders sent to you? What skills do you have to deliver more orders?
4. Have you encountered any dangerous traffic during the delivery process? What was the situation? What's going on inside you? (If there is an accident due to running out of time, ask if more time can be given to avoid the situation.)
5. Was there a traffic accident? Or have you ever heard of a traffic accident around you? How do platforms usually handle this?
6. How do you hope the platform can be improved to help you?



2 years experience
No children, dont need to feed parents
Non-Local

"No,I haven't run the red light I can't if I want to. There's too many cars."

"Big cities are stricter than small cities in traffic regulation."

"They say that in the notification group every day that if you do not obey the traffic rules and are punished for card copying, you will be restricted from taking orders by the platform."



One month experience
No children, dont need to feed parents
Non-Local

"I'm not looking at lights, I'm looking at cars. I will consider the (traffic) lights when there's cars on the road. And when there's no car, I will ignore the light. If I drive retrogradly, I will pull over and drive by the sidewalk. Just a little bit."

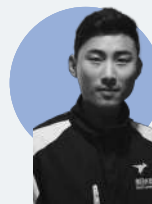


3-4 months experience
Two Children, need to feed family
Non-Local

"It's no use talking. But if we get tickets from the police, we will have a record of it."

"Money is a small thing, life is the most important"

Q: If one of the criteria for rating is traffic regulation, will more people follow traffic rules?
A: I don't know



4 years experience
No children, send money back hoem sometimes
Non-Local

"There's no trick. One hour's worth of technical work and you're gonna be empty the next. "

"That good review that is of no use, even if you give a bad review will not deduct money. But overtime is deducted. Our group chat inside is to say, you complain you won't how to deduct money, overtime will deduct money to the first point delivery. "

"Most of the time it happens in the noon, the peak, that is because there are businesses out of the food, the food is slow, at that time when the time is tight, there are no things, everyone is basically abide by. There is a rainy day, the road slippery dark. It's fine if it rains, you know, drizzily and you slip on the road, but that's all."



2 years experience
No children, dont need to feed parents
Non-Local

"I have some traffic accidents before, ther are nothing serious, I don't think this job is dangerous."



2-3 years experience
Two Children, need to feed family
Non-Local

"I feel afraid too, like those who often run on the road are afraid of us. "

"Yes, a lot of falls. On rainy days, the road is slippery, and sometimes I often fall down when I cross the overpass. "

"Sometimes involuntarily, you see I received more orders today, the time is tight, you have to go through the red light. The heart is anxious. Sometimes, when people meet that kind of situation, not much can be, I wait for a few minutes, no problem, no timeout, if you have a lot of orders, more afraid of timeout, in the mind anxious, you go to the traffic light to see no one rushed past. You think there's no one left, but there could still be danger. Sometimes there is a lot of single connection, there is pressure. No one wants to run the red light, but no one wants to deduct a few dollars. The main thing is the pressure in my heart. I also want to say hurry up and pick up again. We only have one hour, the unit price is relatively high, if more than an hour, the unit price immediately down."



One month experience
No children, dont need to feed parents
Local

"Skills? More practice, More familiar with the map. "

"It (the platform) doesn't help, does it? It's mostly depend on your own."

"OF course the job is safe. OVERTIME deductive see how many overtime oder you have. If less, the platform will not deduct your money."



2-3 years experience
No children, dont need to feed parents
Local

Q: What are your tricks of sending food delivery orders?
A: Yes, I do have some tricks. It is to continue to receive more orders!

Q: What should I do in a dangerous situation
A: Drive slowly

Q: Have you encountered any traffic accidents, safety issues or anything like that
A: yes. Fall off.

Q: Does the platform compensate?
A: Handle it yourself. It's just a minor problem.

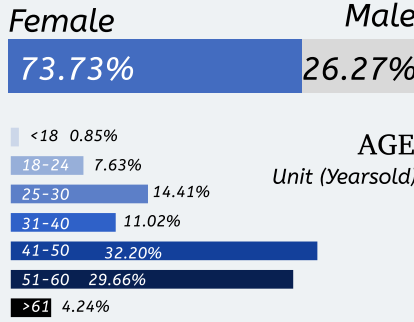
In general, most food delivery men have violated the traffic rules and experience being injured due to some small accidents. However, since most of the accidents are not serious injuries, most food delivery riders choose to continue their dangerous driving behaviors. Moreover, the system’s time limitation urges the food delivery riders to drive dangerously to send the food in time, even though they don’t care about overtime punishment in many cases.

In addition, in the interview, the older riders who have the pressure of feeding families will care more about their personal safety.

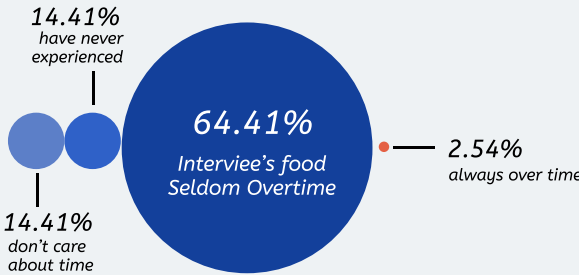
USER RESEARCH-CUSTOMER

OVERVIEW

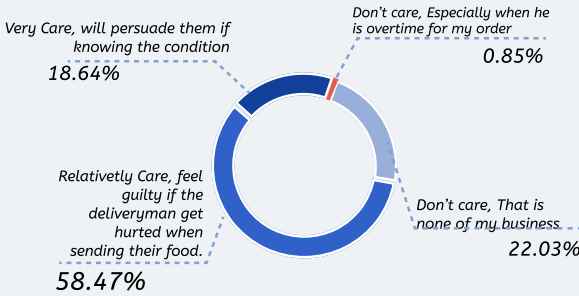
The survey was conducted by anonymous questionnaire with eight single choice questions for investigating the public's concern about the traffic safety of delivery riders. A total of 118 questionnaires were collected, among which 87.29% were 25-60 years old, and more than half of them ordered takeout more than twice a week.



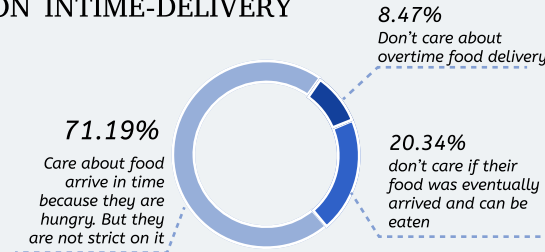
CONDITION OF OVERTIME FOOD DELIVERY



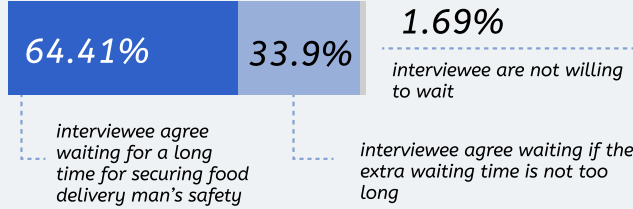
CUSTOMER CARENESS ON FOOD DELIVERYMAN'S OBEYING TRAFFIC RULES



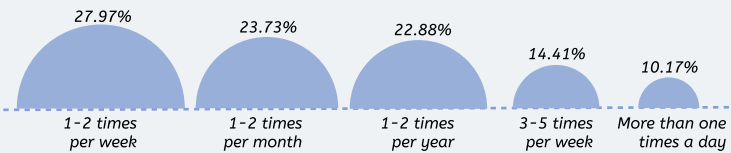
CUSTOMER CARENESS ON INTIME-DELIVERY



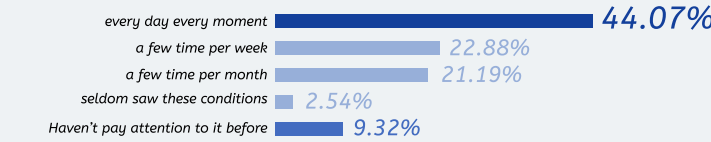
CUSTOMERS'S WILLINGNESS ON WAITING MORE TIME FOR ENSURING SAFETY FOOD DELIVERY



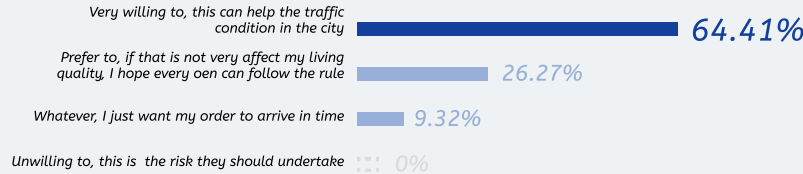
INTERVIEWEES' FOOD DELIVERY ORDER'S FREQUENCY



INTERVIEWEE OBSERVATION ON FOOD DELIVERY MAN'S CONDITION OF VIOLATING TRAFFIC RULES



INTERVIEWEES' WILLINGESS ON DESIGNATE DELIVERY PEOPLE WHO DO NOT VIOLATE TRAFFIC RULES



HUMAN

ENVIRONMENT

SYSTEM

PROBLEMS

restaurant's meal preparing speed is slow

Order concertrated at lunch time

Food Delivery men lacking of safety awareness

Poor Driving skills of specific Individuals

Fluky Road Condition

Weather

Eletronic Motorcycles's classification are vague and they are lacking of regulations

Delivery platform are lacking of safety awareness

Insurance

NEEDS

Calculated the food preparing time and delivery time seperately

more powerful organization

enhaced safety education

Ensure Driving skills of each drivers

More time/ Safety Speed

Better awareness

Approachable first aid kits

Related laws and regulations

Virtualization of lives and safety

More effective Insurance

SOLUTIONS

List time detail when checking out

1. Add Tips for faster meal
2. Encourage people order food in different time or different restaurant

1. Platform Company provide safety education:
a. Mandatory Safety test for per week
b. Set up different safety courses based on differnt's regions' regulation for food delivery men
c. Provide more tests and mandatory education for those who contravene traffic regulations
2. The platform should promote safety awareness of driving
a. Give some award to those who doing well in safety
b. add a ranking of "Safety Food Delivery Drivers"
3. Systems's calculating the dangerous driving behaviors and warning the drivers who have high risk in driving
4. Safety check for each drivers and theirs vehicles each month.

Need Cetification/Test

1. Allowing Delivery Man to apply for extratime from customers
2. The Platform provide extra time automatically when checking the road conditions is complexed

Eletronic Awareness/ Eletronic Alarm:
a.Warning when dangerous driving, lack of balancing, or slips behaviors was detected
b.Noticing when passing through high risk area

Provide some First Aid Stations in the communities. The Station include first aid kits and some food and snacks.

1. Legislation are required
2. Related organization should advocated a clear idea

Adding more humanized details to food delivery man--Add safty rates as a important standard, instad of only counting for delivery speed

1. Legislation of insurance from goverment
2. Related Organizations (e.g. Labor Unions) provide education for workers

CONCLUSION

Based on the information I have collected, the career of delivery riders is faced with the great threat of traffic safety, and the accidents in this part are increasing year by year. Most of the riders are in dangerous driving condition. The fundamental reason is that the platform's algorithm only highly correlated the delivery rider's revenue with time. Most delivery riders are aware that they are driving dangerously, but under pressure to work overtime, they ignore their own safety when delivering their orders.

On the other hand, most takeout customers don't care about the extra minute or two, and they want delivery riders to balance the two basic delivery factors of safety and speed. However, the platform's delivery quality is almost exclusively focused on the "fast" aspect.

Therefore, I hope that the delivery platform can enhance the importance of safety factor design and fill the platform with more humanistic care.



IDEATION



ENHANCE THE HUMANISTIC LINK BETWEEN FOOD DELIVERY MEN AND CUSTOMERS

In the past, the relationship between food delivery riders and customers was relatively distant. The food delivery riders, as someone who represent the platform and contact both customers and restaurants simultaneously, should have a better humanistic link with society (or each communities). In this system, we strengthen the humanized description of food delivery workers, showing them as independent individuals and their contribution to the local communities.

REFINE THE TIME FACTORS AND GIVE THE RIDERS MORE TIME TO DRIVE SAFE

In the past system, the calculation of time was vague: all kinds of special situations were generally calculated into the demand of delivery, which led to the extreme compression of the time of delivery riders and prompted the delivery riders to take risks of violate traffic rules and dangerous driving. In this optimization, users will see their own delivery order process more clearly. On the one hand, it can better supervise the production process of their own delivery. And on the other hand, it can give riders some reasonable additional time, such as the time to climb up stairs and the time to wait for traffic lights.



EMPHASIZE THE WORK SAFETY DIMENSION OF FOOD DELIVERY RIDERS IN THE SYSTEM

In the past, the takeout ranking only emphasized the number of orders delivered while ignoring the safety. This system will establish the ranking of safety factors, so that users can choose more safe and responsible takeout workers for delivery.

MINDMAP



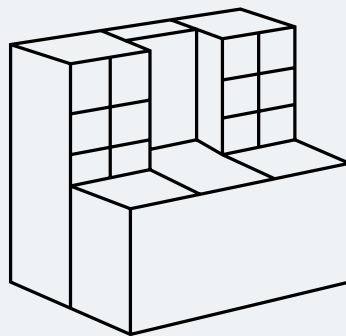
Snack



Charging



First Aid Kits



Set some station in the community



Rain ware



Enhance the Humanistic link between Food delivery men and customers

Strengthened the idea that Food delivery riders is living humans, instead of tools



Can see the persona of food delivery man

Can see what they are working for...

Can see their Characteristics



Add a selection called "safety insurance", instead of only having "in time insurance"

Food Safety are included



Build up the emotional link between customers and food delivery riders

Can see the delivery man's contribution to the local society

e.g. Serve for 3 months during the pandemic lockdown; or, doing other good thing for the local community



Line the dangerous area into red color in map, and remind the delivery drivers when they pass through certain areas.

Electronic Awareness, help delivery men to concentrate more

Refine the time factors and give the riders more time to drive safe

Clear Time detail

a completed time schedule, includes the specific time needed for each step

Customer can add some specific condition of their order, such as long time waiting for the elevators

customer can add extra safety time for food delivery drivers



Customer will get coupon based on the safety time they add

An emergency time application for two-way confirmation

Riders can apply additional emergency time requests to the system when they encounter bad traffic conditions and dangerous roads

If more than two riders report the same condition in same location, system will give extra time automatically



Give the safety stickers a safety reward and increase their unit price

Restaurants and customers can choose food delivery men who have higher safety coefficient for priority shipping

If the condition was not reported by other riders, the request will sent to the customer. If the customer confirm this conditions, they can approve the application.



Warning the food delivery drivers if they have dangerous driving behavior

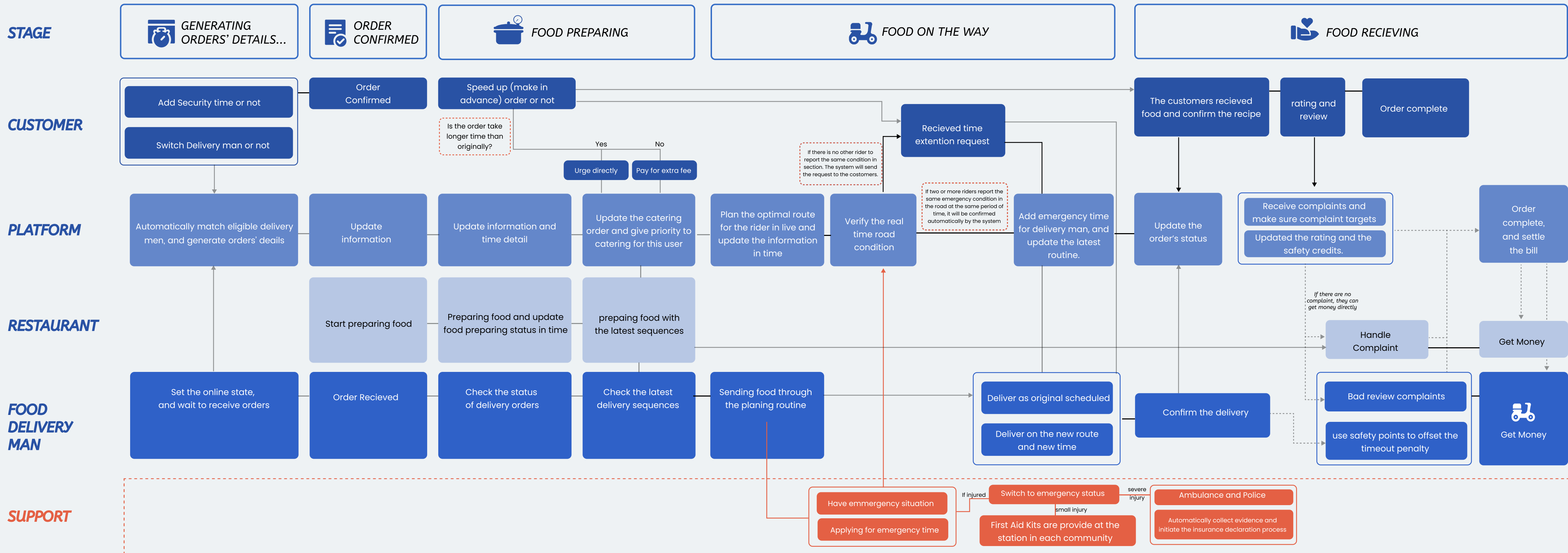


Add Radar warning, warn the surrounding cars and food delivery riders

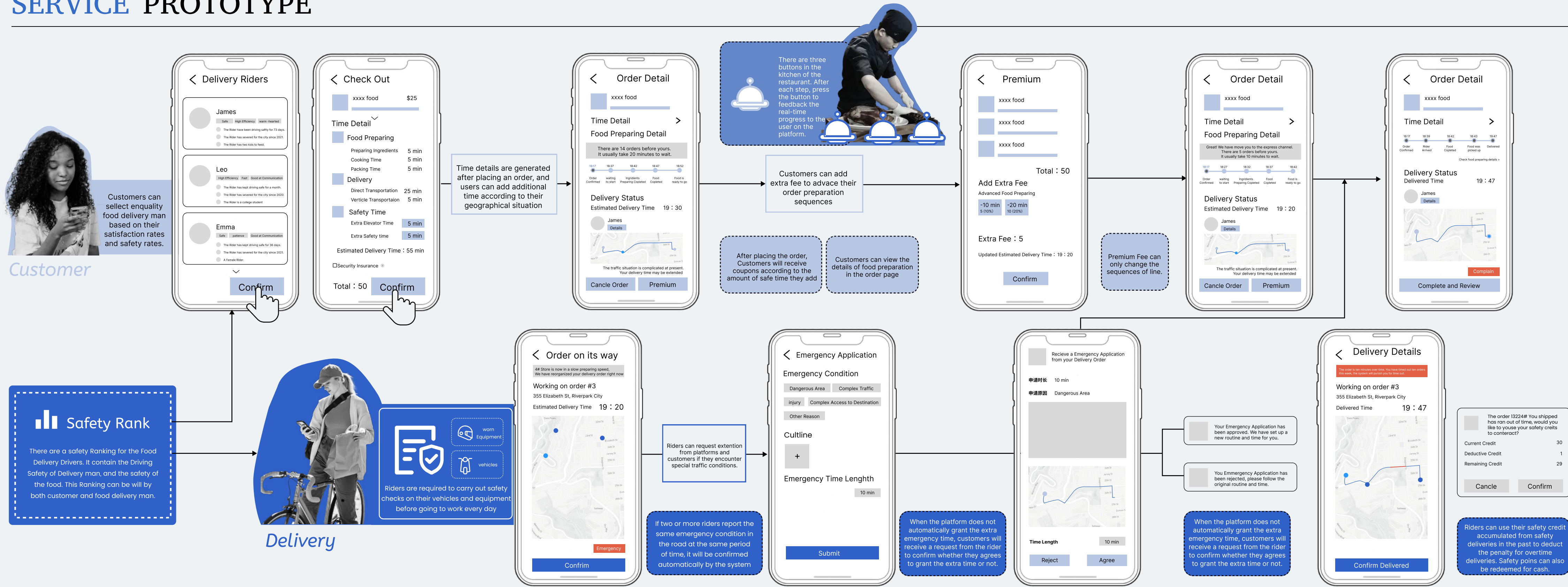
Emphasize the work safety dimension of Food delivery riders in the system

SERVICE BLUEPRINT

The service blueprint of this design system is preseted in the following table:



SERVICE PROTOTYPE



USER INTERFACE

9:41

Checkout

Order Detail Time detail

Food Preparing Time

Preparing time

Cooking time

Packing time

5 min

5 min

5 min

Delivery Time

Horizontal Traffic time

Vertical Traffic Time

25 min

8 min

Safe Time

Elevator Time

Extra Safe time

5 min

5 min

You will recieve a \$5 dollar coupon for your kindness.

Total Time Need : 78 min

Estimated Delivery time : 19:20

Safe insurance ...

合计 : 50

Checkout

Customer checkout

Lime Chicken

Grilled lime chicken breast topped with pico de gallo and radish

\$3.75

x3

Coke

Coca Cola

\$1.75

x1

Coupon

- \$1.25

Total : \$11.75

Order Detail

Switch Delivery Man

Sam

I work for my college tuition.

752 | 98% | 96%

Jack

Working man. Try best to stay in this city.

659 | 84% | 95%

Jacob

I am a living poem. Here is my website. link

373 | 99% | 99%

James

I am supporting my two kids and disable wife.

1408 | 96% | 97%

Delivery Man List

Premium

Adavanced Food Producing Process

-10 mins

\$1.10 (20%)

-15 mins

\$1.38 (25%)

-18 mins

\$1.65 (30%)

The Updated Bill

Estimated Arriving Time Updated

The Updated Time detail

19:05

\$1.38

Extra Fee

Cancel

Checkout

Order Detail

Emergency Time Application

Emergency Condition*

Dangerous Area

Injury

Complex access to Destination

Complex Traffic

Other Reasons

Supplymentary

The road was flooded

Cultline

Emergency Time Length

5 mins

10 mins

15 mins

more

Submit

Emmergency Time Application

Recieve a Emergency Application from your Delivery Order

Details

Emergency Time Length

Emergency Condition

5 mins

Dangerous Area

Supplymentary

No, you can handle it

Yes, Take your time

Emmergency Time Approvment

The order 13224# You shipped has ran out of time, would you like to youse your safety creits to contract?

Current Credit

Quits Credit

Remaining Credits

30

1

29

Safety Credit Deductive

Sam

752 | 98% | 96%

Deliveries

Safe Rate

Satisfaction

Safe and Secure

Smooth Communication

Quick and Efficiency

Experienced

Hard-working

Delivery man profile

Delivery Details

Estimated arriving time

19:05

Sam has your order. You'll get an alert when it's at your door.

Details

Contact

The traffic situation is complicated at present. Your delivery time may be extended

Delivery Details

Food Preparing Details

Great! There are 0 order before yours, we are working on your order right now!

17:47

Order Confirmed

17:48

Lining Finished

17:53

Completed Preparing

18:00 (+2)

Completed Cooking

18:02 (-3)

Food is Ready to go

Cancel

Premium Processing

Order Detail

Safety Rankings

(Weekly)

Jacob

130

100%

Sam

97

100%

James

110

99%

Mandy

107

99%

Leo

156

98%

Delivery Details

Safety Rankings

(Weekly)

Jacob

130

100%

Sam

97

100%

James

110

99%

Mandy

107

99%

Leo

156

98%

Safety Rankings

Lime Chicken

Grilled lime chicken breast topped with pico de gallo and radish

\$3.75

x3

Coke

Coca Cola

Coupon

Total : \$

Delivery Details