Interviews with Drivers

Overview

Before each wave of our interview, we conducted training sessions for our research assistants to make sure they understood the interview questions without knowing the purpose of the study. We asked them to request a carpool during weekdays from 4:30 to 5 pm, with a minimum route distance of 10 km. The interview conversation was recorded with the driver's consent. To facilitate the interviews, we paid drivers extra a 50 RMB (about 8 USD in 2018) and explained to them that the results would be anonymous and used for research only. Additionally, each interviewer was paid 100 RMB (about $16) for each interview.

In July 2021, we recruited local students as our research assistants from the city where our empirical data were collected. All these students can speak the local dialect which facilitates conversation with drivers. In total, we collected responses from 12 drivers. The main purpose of the interview is to understand (1) the criteria that drivers apply to choose passengers; and (2) whether these criteria vary with waiting time and the size of the choice set.

From October to November 2022, we conducted a second wave of interviews to collect more details on these questions, such as whether the criteria for pickup and drop-off time differ. Based on the first wave of responses, we further simplified our questions to make them easier for drivers to understand. For example, instead of asking about the driver's decisions made t and t+x minutes before departure, we asked about those made t and t-x minutes before departure. Due to the strict COVID policy in China at that time, we had to conduct this wave in Beijing instead, and collected 22 driver responses.

In the following sections, we summarize all responses from each wave of our study.

First-wave interview questions and results

1. Are you a part-time or full-time driver? 你是全职还是兼职司机

Result: All 12 drivers were part-time.

2. If you plan to leave at 4:30 p.m., when would you stop searching for passengers on the platform? 假设您的计划出行时间是下午 4：30，您会提前多久停止在平台上找乘客？

Result: 8 drivers chose to search until departure, 2 continued searching even after the planned departure time, and 1 stopped searching 0.5 hours before leaving. Additionally, 1 driver was unsure and did not provide an answer.

3. We denote the answer in Q2 as t. At time t-5, what is the lowest compatibility index that you would accept? Please answer with a number between 0 to 100.假设回答时间第二题回答时间是 t，请问在 t-5 分钟你能接受的最低顺路率是多少？从 0 到 100 给一个数字

Result: 5 drivers reported 90%, 1 reported 85%, 5 reported 80%, and 1 driver did not have a preference.

4. Now it is t-15, would you accept a request with slightly higher compatibility than the answer in Q3 (e.g., 1% higher) at t-15, or would you choose to wait for better ones? 假设现在是 t-15 分钟，有一个比您刚说的最低顺路率高一点的乘客订单（如就比您的最低顺路率高 1%），您会立即选择接这个单吗？还是会等等看？

Result: 8 drivers chose to accept the request, 1 chose to wait, 2 said "It depends", and 1 did not have a preference.

5. How about at t-30? Would you accept the request or wait? 假设时间更早一些，比如

t-30 分钟出行，您会立即接这个单吗？还是会等等看？

Result: 4 drivers chose to accept, 7 chose to wait, and 1 did not have a preference.

6. Under such a scenario where there is a request with slightly higher compatibility than

the answer in Q3, how much earlier would you choose to wait? 像刚刚这种情况，时间大概

要早多久您会选择等等看？

Result: Among the 9 drivers who gave a valid answer, 5 said "It depends", 1 reported 1 hour,

2 reported 30 minutes and 1 reported 15 minutes before departure.

7. Suppose there are two possible requests at t-15, one just meets the threshold in Q3,

and the other is slightly better, e.g., the compatibility score is 1% higher. Would you accept

one of these two or wait? 假设现在时间是 t-15 分钟，您有两个不错的备选乘客订单，一个

是您在题 3 回答的刚刚能接受的，另外一个是稍微更顺路的，比如顺路率高 1%，现在您

是会在这两个不错的订单中间进行选择接受一个，还是会继续等待更好的？

Result: all drivers chose to accept one of the requests.

7.1 If the driver chooses to accept, ask whether she would accept one request or wait for

better ones when there are three possible requests, two of which just meet the threshold and the

other one is slightly better. 如果选择立即应答的话，继续问：假设现在有三个不错的订单，

分别是两个您在题 2 回答的刚刚能接受的，另外一个是稍微更顺路的，你会等等看吗？

Result: All drivers chose to accept one of the requests.

7.2 How about four requests, would you accept or wait? 有四个不错的订单，还是选择直接选择。

Result: 11 drivers chose to accept, and 1 driver did not provide an answer.

7.3 If the driver chooses to accept, ask how long before departure (s)he would choose to wait? 如果不等待，时间提前多久，你会选择等等看？

Result: 6 drivers chose never to wait, 2 drivers said "It depends", 2 reported 30 minutes, 1 reported 10 to 20 minutes and 1 driver did not provide an answer.

8 Would you leave on time regardless of whether you find a suitable match? 假设您发布了一个行程，那无论这之前您有没有找到合适的乘客，都会选择准点出发吗？

Result: 7 drivers said yes, 1 driver chose to wait, 3 drivers said "It depends" and 1 driver did not provide an answer.

8.1 If you choose to leave on time, what is the main reason? 如果您选择了准点出发，主要是什么原因？

Result: The main reason was having a fixed schedule or avoiding wasting time.

8.2 If you choose to wait, how long would you wait? Will you wait until there is a suitable passenger or stop waiting at a certain time? 如果您选择继续等待，请问最长能等多久（会为了等到合适的乘客一直等下去，还是看情况而定）？

Result: The only driver who chose to wait in Q8 reported waiting for 1 hour. Among the 3 drivers who said "it depends", 1 could wait up to 5 minutes, 1 around 10 minutes, and 1 did not answer this question.

8.3 Why do you stop waiting? 又是什么原因导致了您最终停止等待？

Result: We only have data for 1 driver who said "It depends" and the reason is not wanting to waste time anymore.

9 On average, how frequently do you post the trips on the platform each week? 平均而言，请问您每周会发布几次下班时间的顺风车？

Result: 1 driver reported 1~3 times, 2 reported 2~3 times, 1 reported 3~4 times, 1 reported 4~5 times, 4 reported 5 times, and 3 said their posting frequency varied.

10 What are your criteria for choosing passengers? 你一般是如何选择乘客的？选择标准有哪些？

Result: 10 drivers reported route compatibility, 7 reported time compatibility, 5 mentioned the passenger's credit score and 1 mentioned tips.

Second-wave interview questions and results

1. What is the lowest compatibility index you would accept when it is far from the departure time at evening peak, e.g., 40 minutes before departure? Please provide a number between 0 to 100.假设现在离你晚高峰时段的出行时间还很远，比如出行前 40 分钟，那么你能接受的最低顺路率是多少？请从 0 到 100 给一个数字

Result: 6 drivers reported at least 90%, 8 reported 80%~90%, 4 reported 70%~80%, 3 reported 60%~70% and 1 was unsure about the answer.

2. Now, it is 40 minutes before departure, what is your requirement for pickup distance? 请问这个时候你对接单距离要求是什么？

Result: 2 drivers reported less than 3 km, 15 reported 3~5 km, 3 reported 5~6 km, and 2 said any request less than 10 km was acceptable.

3. What is your requirement for the distance between the passenger's and your destinations (drop-off distance thereafter)? 你对乘客目的地和你自己要去的地方之间的距离差（我们定义为下车距离）要求是什么？

Result: 2 drivers reported less than 3 km, 14 reported 3~5 km, 3 reported 5~8 km, 2 said less than 10 km, and 1 did not provide a valid answer.

4. What is your requirement for the time difference between the passenger's and your departure time (departure time difference thereafter)? 你对乘客出行时间和自己计划出行时间上的时间差（我们定义为出行时间差）要求是什么吗？

Result: 4 drivers reported a time difference between 5 and 10 minutes, 8 reported 10~20 minutes, 6 reported less than 30 minutes, 1 reported 30~40 minutes, and 3 did not provide valid answers.

5. Suppose now it is only 20 minutes before departure, and you have not found any suitable passenger. 假设现在离你出发时间更近了，比如出行前 20 分钟，这时候你还没找到合适的乘客，请依次回答如下问题

5.1. Would you lower the requirement for compatibility? If yes, by how much would decrease it? 你会降低最低顺路率的要求吗？如果会，会降低多少？

Result: 5 reported that they would lower the requirement. Among them, 2 said they would decrease it by 10%, 2 by 5% and 1 was unsure about the exact percentage.

For the remaining drivers, 13 kept the same requirement, 1 even would tighten up the requirement and 3 reported that they would give up searching and leave on their own.

5.2. Would you lower the requirement for the pickup distance? If yes, by how much would you increase it? 你会放宽接单距离上的要求吗？如果会，会放宽多少？

Result: 3 reported that they would lower the requirement. Among them, 2 would increase the distance by 5 km, and 1 by 1~2 km.

For the remaining drivers, 2 were unsure about the distance and 17 would not lower the requirement.

5.3. Would you lower the requirement for the drop-off distance? If yes, by how much would you increase it? 你会放宽下车距离上的要求吗？如果会，会放宽多少？

Result: 3 reported that they would lower the requirement. Among them, 1 would increase it by 5 km, and 2 by 1~2 km.

For the remaining drivers, 2 were unsure about the distance and 17 would not lower the requirement.

5.4. Would you lower the requirement for departure time difference? If yes, by how much would you increase it? 你会放宽出行时间差吗？如果会，会放宽多少？

Result: 3 reported that they would lower the requirement. Among them, 2 would increase it by 15 minutes, 1 by 5~10 minutes.

For the remaining drivers, one said (s)he was unsure about the time difference and 18 said they would not lower the requirement.

6. Now it is about to leave, would you further relax the requirement for passengers?

假设现在马上你就要出发了，那么你会进一步降低对于乘客的要求吗？

Result: None of them would further relax the requirement. 13 kept the same, 5 would even tighten up the requirement and 4 reported that they would give up searching and leave on their own.

7. Ask drivers the following questions based on the answers in Q5 and Q6. 根据司机在第 5 和 6 题的答案，访谈司机

7.1. If the answers in Q5 and Q6 indicate that they lower the threshold for matching a passenger when it's closer to departure time, ask their reasons for lowering the threshold. 如果司机在 5, 6 里面的答案显示他们接单的要求会随着时间的推移变宽松呢？那么就问这个司机，"你之所以会降低接单要求，原因是什么呢？"

Result: Among the 2 drivers who first relaxed the requirement at x-20 (where x was the planned departure time), and did not change it at x, both claimed that reducing the travel cost was the main reason.

Among the 3 drivers who relaxed the requirement at x-20, but tightened it at x, 2 mentioned the reason for reducing the travel cost and 1 did not provide an answer.

7.2. If the answers in Q5 and Q6 indicate that they don't change the threshold for matching a passenger, ask why they don't change the threshold as time gets closer to the departure time. 如果司机在 5,6 里面的答案显示接单要求不随时间变化，则问这个司机，"你之所以不改变接单要求，是什么原因呢？"

Result: Among drivers who never relaxed the requirement, 9 drivers mentioned that it is too time-consuming to change the requirement, 7 drivers believed it was not profitable, and 3 drivers did not provide valid answers.

8. We denote a threshold request as one that just meets your requirement for compatibility, pickup distance, drop-off distance, and departure time difference. Now there are two threshold requests at a time which is far away from departure time, such as 40 minutes before departure. Would you accept one of them or wait for better ones? If you wait, how long would you wait? 假设现在离你出行时间还很远，比如出行前 40 分钟，你有两个保底订单（保底订单指的是在最低顺路率，接单距离，到达距离和出行时间差这四个维度都刚好满足你的要求，换句话说，保底订单指的是你刚刚愿意接受的订单），你会在这二者之间选一个接单吗，还是会继续等待更好的？如果选择等待更好的，请问你愿意等多久？比如再等 10 分钟，20 分钟，还是更久？

Result: 16 chose not to wait and 6 chose to wait.

Among the drivers who waited, 1 would wait for 15 minutes, and 1 for 20 minutes. 4 did not provide valid answers.

9. When it is 40 minutes before departure, will you increase your requirement for passengers when the number of threshold requests increases? 整体而言，在离出行前 40 分钟的时候，你接单的要求是否会随着可挑选的保底订单数量的增多而变高？

Result: 16 said no, 5 said yes, and 1 was unsure.

10. For each trip, what is the probability of encountering at least one threshold request (or even better request)? 你觉得每次出行，能碰到至少一个保底订单或者比保底单更好的行程的可能性有多大？

Result: 1 reported that it was rare to encounter such requests, 3 said that the likelihood was between 20% and 30%, 1 said 30-40%, 1 said 50%, 4 said 50%-60%, 5 said 70%-80%, 3 said 80%-90%, 1 said 100%, and 1 was unsure.

10.1. What is the probability of encountering more than one threshold request? 你觉得每次出行能遇到超过一个保底订单的可能性有多大？

Result: Among 8 drivers who gave an answer, 1 said it was impossible, 1 said the chance was very little, 1 said between 30% and 40%, 1 said 50%, 1 said 100%, and 3 were unsure.

10.2. Will this probability increase if the platform subsidizes passengers? If yes, by how much will it increase? 假设平台现在给顺风车乘客补贴，你觉得碰到保底订单或者比保底单更好的可能性会增加吗？

Result: 9 said yes, 12 said no, and 1 was unsure

10.3. Meanwhile, will you wait longer for better requests? 同时，你会愿意花更久的时间来等待更好的单吗？

Result: 2 said yes, 18 said no, and 1 was unsure

11. Would you leave on time no matter whether you find a good match? 假设你发布了一个行程，那无论这之前您有没有找到合适的乘客，都会选择准点出发吗？

Result: 14 chose to leave and 8 chose to wait.

11.1. If you leave one time, what is the main reason? 如果您选择了准点出发，主要是什么原因？

Result: Among the 14 drivers who would leave on time, 4 drivers left to avoid the evening peak, and 9 drivers left because they either had a fixed schedule or did not want to waste time. 1 driver did not provide a valid answer.

11.2. If you choose to wait, how long would you wait? Will you wait until there is a suitable passenger or stop waiting at a certain time? 如果您选择继续等待，请问最长能等多久（会为了等到合适的乘客一直等下去，还是看情况而定）？

Result: Among the drivers who waited, 1 would wait for 5-10 minutes, 1 for 10 minutes, 1 for 10~20 minutes, 2 for up to 15 minutes, and 1 for 45 minutes. The remaining 2 drivers said "It depends".

11.3. Why do you stop waiting? 又是什么原因导致了您最终停止等待？

Result: Among the 8 drivers who waited, 4 left because of time concerns, 2 left to avoid the evening peak, and the remaining two did not provide valid answers.

12. On average, how frequently do you post the trip on the platform each week? 平均而言，请问您每周会发布几次下班时间的顺风车？

Result: 2 drivers reported 1~2 times, 1 reported 2~4 times, 1 reported 3~4 times, 7 reported 4 times, 9 reported 5 times, 1 reported 4~5 times, and 1 reported 5~6 times.

13. What are your criteria for choosing passengers? 你一般是如何选择乘客的？ Please rank the following factors by their importance level.你一般是如何选择乘客的？选择标准有哪些（以下为一些常用原因，也可以补充你自己认为的原因）？请让司机按照重要性进行排序：compatibility of route, departure time difference, credit score, tips, number of passengers, auto confirmation 时间合适、路线合适、信用分、感谢费、乘客人数、闪电确认

Result: 11 drivers ranked compatibility of route as the first, 3 ranked compatibility of departure time as the first, 6 ranked both route and time compatibility as the first, and 2 ranked the passenger's credit score as the first.