# **Marketing Research Report**



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#### **Executive Summary**

The purpose of Uber's marketing research is to find consumer acceptance of Uber's self-driving technology. A survey was conducted with a random sample of 126 respondents who filled out and submitted an internet-based questionnaire. The responses indicated the following:

- 77% of the respondents most preferred ride sharing company is Uber
- 43% of the surveyors are likely to ride Uber's self-driving car, 34% are neutral and 24% are unlikely to try it
- 53% trust Traditional Car Manufacturers to introduce the self-driving technology while only 14% trust a ride sharing companies like Uber, Lyft to introduce it
- 65% of respondents feel safety is the biggest issue for Uber's self-driving cars followed by self-driving cars not driving as well as humans (18.4%)
- Majority of the respondents (48.4%) would watch the road instead of doing any other stuff while riding in Uber's self-driving car
- Most respondents (67%) would prefer paying less than current ride price for Uber's self-driving car
- 57% of the respondents would be willing to ride in an Autonomous Uber for free while only 10% would be unwilling

### Background and Objectives

Uber is a peer-to-peer ridesharing, food delivery, and transportation network company headquartered in San Francisco, California, with operations in 633 cities worldwide. Its platforms can be accessed via its websites and mobile apps.

Primary objective of Uber for conducting the Marketing Research is find the consumer acceptance of Uber's self-driving technology using a survey. Secondary objectives are to find how much more/less consumers will be willing to pay for self-driving Uber, their biggest concerns and whom do they trust for introducing the self-driving technology.

### Research Design and Data Collection

Google Forms was used to create a survey. The respondents were given a link through which they are redirected to the questionnaire on the Google Forms website. Respondents' responses are saved on the Google Forms website which can be

viewed/downloaded. Sample size of this survey was 150. Survey consisted of 18 questions which were a mixture of multiple choice, checkboxes and likert scale questions.

#### Survey Results

Following are the questions were asked in the survey to meet the and we got consumer opinion of them.

How likely are you going to ride Uber's self-driving cars?

Data from the survey reveals that 18.3% of the sample population are very likely to ride in Uber's self-driving cars, 24.6% will likely ride, 34.1% are neutral, 9.5% are unlikely to try out Uber's self-driving cars and 13.5% are very unlikely to try it out. With majority of the respondents displaying positive or neutral attitude towards Uber's self-driving, it would help Uber to determine whether to proceed with this technology.

What is your biggest concern about Uber's self-driving car?

Over 65% of the respondent's major concern about a self-driving Uber is safety consequences of equipment failure or system failure. 18.4% feel that a self-driving vehicle would not drive as well as a human driving it. Uber can work on easing these concerns of the respondents.

How much will you be willing to pay for a self-driving Uber?

51.6% of respondents are willing to pay 5-10% less than current rate of the ride while 15.9% are willing to pay 0-5% less than current rate. 23.8% have no issues in paying same rate as the current one. Only 6.3% are willing to pay 0-5% more than current rate whereas even less proportion are willing to pay 5-10% more than current rate. Responses from the survey indicate that consumer's expectation from a self-driving Uber. Since a driver is not involved, consumers feel that ride price of a self-driving Uber should be less than the current ride price.

Would you travel in autonomous Uber if offered for free?

Majority of respondents (57.3%) would travel in an autonomous Uber if offered for free. 32.5% were unsure and only 10.3% revealed that they won't travel in an autonomous

Uber for free. Uber can use this data. They can offer first few rides for free and let the consumers get used to the new technology.

Whom do you trust for introducing self-driving car?

53.6% respondents trust Traditional Car Manufacturers like Ford and BMW to introduce self-driving technology. Next is Existing Technology Company like Intel (16.8%) followed by New Autonomous Car Focused Company like Waymo. Respondents trusted Uber and Lyft the least for introducing a self-driving car.

 How likely do you think it is that the following benefits will occur when using completely self-driving vehicles?

According to respondents, less traffic congestion, better fuel economy, fewer crashes and shorter travel time are some of the advantages of self-driving vehicles. Their responses tell us that people do feel that autonomous vehicles will bring about a positive change.

• If you were to ride in a completely self-driving vehicle, what do you think you would use the extra time doing?

Majority of respondents (48.4%) said that they would watch the road while travelling in a self-driving car. Text or talk with friends/family, work and read would be the other choices of respondents while riding in a self-driving car.

#### Conclusion

Based on the data obtained from the survey, following conclusions can be drawn:

- Uber is the most preferred ride hailing service
- People are likely to ride Uber's autonomous car
- Safety is the biggest concern when riding in a self-driving Uber
- Respondents expect to pay less in a self-driving Uber as compared to an Uber with a driver

# **Appendix**



Figure 1

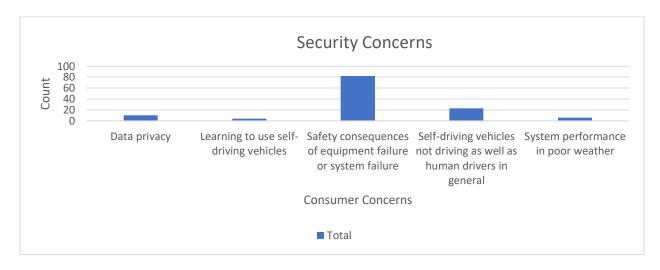


Figure 2

# How much will you be willing to pay for a self-driving Uber?

126 responses

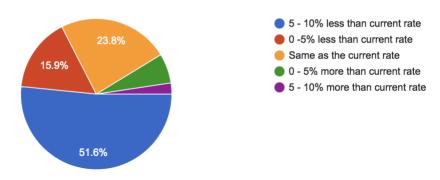


Figure 3

# Would you travel in autonomous Uber if offered for free?

117 responses

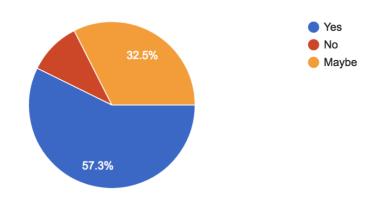
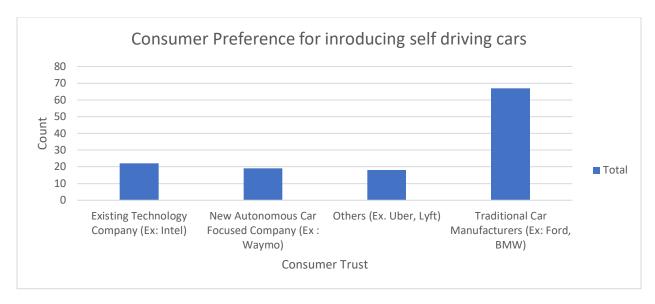


Figure 4





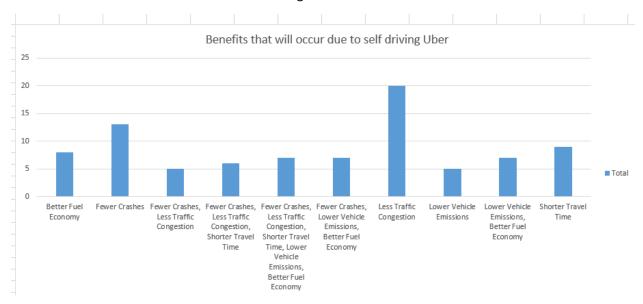


Figure 6



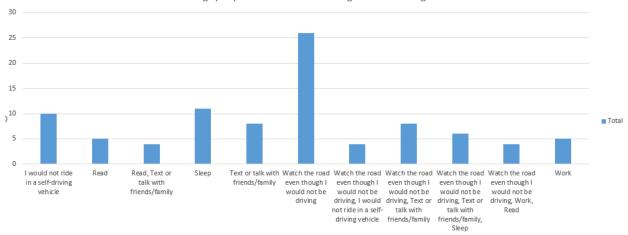


Figure 7

# Statistical Analysis

| Anova: Single Factor                                       |             |     |             |             |             |             |
|--|-------------|-----|-------------|-------------|-------------|-------------|
|  |             |     |             |             |             |             |
| SUMMARY  |             |     |             |             |             |             |
| Groups   | Count       | Sum | Average     | Variance    |             |             |
| How likely are you going to ride Uber's self-driving cars? | 126         | 409 | 3.246031746 | 1.562984127 |             |             |
| 5 - 10% less than current rate                             | 126         | 65  | 0.515873016 | 0.251746032 |             |             |
| 0 -5% less than current rate                               | 126         | 20  | 0.158730159 | 0.134603175 |             |             |
| Same as the current rate                                   | 126         | 30  | 0.238095238 | 0.182857143 |             |             |
| 0 - 5% more than current rate                              | 126         | 8   | 0.063492063 | 0.059936508 |             |             |
| 5 - 10% more than current rate                             | 126         | 3   | 0.023809524 | 0.023428571 |             |             |
|  |             |     |             |             |             |             |
| ANOVA  |             |     |             |             |             |             |
| Source of Variation  | SS          | df  | MS          | F           | P-value     | F crit      |
| Between Groups   | 993.4510582 | 5   | 198.6902116 | 538.0778048 | 3.1624E-245 | 2.226044984 |
| Within Groups  | 276.944444  | 750 | 0.369259259 |             |             |             |
| Total  | 1270.395503 | 755 |             |             |             |             |

| Anova: Single Factor   |             |     |             |             |             |             |
|--|-------------|-----|-------------|-------------|-------------|-------------|
| SUMMARY  |             |     |             |             |             |             |
| Groups   | Count       | Sum | Average     | Variance    |             |             |
| How likely are you going to ride Uber's self-driving cars?           | 126         | 409 | 3.246031746 | 1.562984127 |             |             |
| Safety consequences of equipmentfailure or system failure            | 126         | 82  | 0.650793651 | 0.229079365 |             |             |
| Data privacy   | 126         | 10  | 0.079365079 | 0.073650794 |             |             |
| Self-driving vehicles not driving aswell as human drivers in general | 126         | 23  | 0.182539683 | 0.150412698 |             |             |
| Learning to use self-driving vehicles                                | 126         | 4   | 0.031746032 | 0.030984127 |             |             |
| System performance in poor weather                                   | 126         | 6   | 0.047619048 | 0.045714286 |             |             |
| ANOVA  |             |     |             |             |             |             |
| Source of Variation  | SS          | df  | MS          | F           | P-value     | F crit      |
| Between Groups   | 1009.206349 | 5   | 201.8412698 | 578.6663431 | 1.4991E-254 | 2.226044984 |
| Within Groups  | 261.6031746 | 750 | 0.348804233 |             |             |             |
| Total  | 1270.809524 | 755 |             |             |             |             |

| Anova: Single Factor                                       |             |     |             |             |             |             |
|--|-------------|-----|-------------|-------------|-------------|-------------|
| SUMMARY  |             |     |             |             |             |             |
| Groups   | Count       | Sum | Average     | Variance    |             |             |
| How likely are you going to ride Uber's self-driving cars? | 126         | 409 | 3.246031746 | 1.562984127 |             |             |
| Traditional Car Manufacturers (Ex: Ford, BMW)              | 126         | 67  | 0.531746032 | 0.250984127 |             |             |
| New Autonomous Car Focused Company (Ex: Waymo)             | 126         | 19  | 0.150793651 | 0.129079365 |             |             |
| Existing Technology Company (Ex: Intel)                    | 126         | 22  | 0.174603175 | 0.145269841 |             |             |
| Others (Ex. Uber, Lyft)                                    | 126         | 18  | 0.142857143 | 0.123428571 |             |             |
|  |             |     |             |             |             |             |
|  |             |     |             |             |             |             |
| ANOVA  |             |     |             |             |             |             |
| Source of Variation  | SS          | df  | MS          | F           | P-value     | F crit      |
| Between Groups   | 918.2063492 | 4   | 229.5515873 | 518.937491  | 5.7014E-197 | 2.386188084 |
| Within Groups  | 276.468254  | 625 | 0.442349206 |             |             |             |
| Total  | 1194.674603 | 629 |             |             |             |             |

### Conjoint Analysis

| A  | D   | U   | U  | C  | Г  |
|--|---|---|--|--|--|
| SUMMARY OUTPUT   |   |   |  |  |  |
| Regression   | n Statistics  |   |  |  |  |
| Multiple R   | 0.252395212   |   |  |  |  |
| R Square   | 0.063703343   |   |  |  |  |
| Adjusted R Square  | -0.026641071  |   |  |  |  |
| Standard Error   | 1.266737423   |   |  |  |  |
| Observations   | 126   |   |  |  |  |
| ANOVA  |   |   |  |  |  |
|  | df  | SS  | MS   | F  | Significance F   |
| Regression   | 11  | 12.44591427   | 1.131446752  | 0.705116566  | 0.7314811  |
| Residual   | 114   | 182.9271016   | 1.604623698  |  |  |
| Total  | 125   | 195.3730159   |  |  |  |
|  |   |   |  |  |  |
|  | Coefficients  | Standard Error  | t Stat   | P-value  | Lower 95%  |
| Intercept  | Coefficients<br>3.269034771   | Standard Error<br>0.934575967   | t Stat<br>3.497880201  | P-value<br>0.000669647   | Lower 95%<br>1.41764697  |
| Intercept<br>5 - 10% less than current rate  |   |   |  |  | 1.41764697   |
|  | 3.269034771   | 0.934575967   | 3.497880201  | 0.000669647  | 1.41764697<br>-1.46485587  |
| 5 - 10% less than current rate   | 3.269034771<br>0.036336367  | 0.934575967<br>0.757798123  | 3.497880201<br>0.047949929   | 0.000669647<br>0.96184005<br>0.72720462  | 1.417646979<br>-1.464855879<br>-1.88144821   |
| 5 - 10% less than current rate<br>0 -5% less than current rate   | 3.269034771<br>0.036336367<br>-0.282298913  | 0.934575967<br>0.757798123<br>0.8072466   | 3.497880201<br>0.047949929<br>-0.349705917   | 0.000669647<br>0.96184005<br>0.72720462<br>0.772963726   | Lower 95%<br>1.41764697<br>-1.46485587<br>-1.88144821<br>-1.77883547<br>-1.68863302  |
| 5 - 10% less than current rate<br>0 -5% less than current rate<br>Same as the current rate<br>0 -5% more than current rate   | 3.269034771<br>0.036336367<br>-0.282298913<br>-0.226596941  | 0.934575967<br>0.757798123<br>0.8072466<br>0.783566162  | 3.497880201<br>0.047949929<br>-0.349705917<br>-0.289186736<br>0.029664226  | 0.000669647<br>0.96184005<br>0.72720462<br>0.772963726   | 1.417646979<br>-1.464855879<br>-1.88144821<br>-1.778835479<br>-1.68863302  |
| 5 - 10% less than current rate<br>0 -5% less than current rate<br>Same as the current rate   | 3.269034771<br>0.036336367<br>-0.282298913<br>-0.226596941<br>0.025670718   | 0.934575967<br>0.757798123<br>0.8072466<br>0.783566162<br>0.865376278   | 3.497880201<br>0.047949929<br>-0.349705917<br>-0.289186736<br>0.029664226<br>1.006435438   | 0.000669647<br>0.96184005<br>0.72720462<br>0.772963726<br>0.976386713  | 1.417646979<br>-1.464855879<br>-1.88144821<br>-1.778835470<br>-1.688633020<br>-0.495587914   |
| 5 - 10% less than current rate 0 - 5% less than current rate 0 - 5% more than current rate 0 - 5% more than current rate Safety consequences of equipmentfailure or system failure Data privacy  | 3.269034771<br>0.036336367<br>-0.282289813<br>-0.226596941<br>0.025670718<br>0.511799013                              | 0.934575967<br>0.757798123<br>0.8072466<br>0.783566162<br>0.865376278<br>0.508526422  | 3.497880201<br>0.047949929<br>-0.349705917<br>-0.289186736<br>0.029664226<br>1.006435438   | 0.000669647<br>0.96184005<br>0.72720462<br>0.772963726<br>0.976386713<br>0.316337608<br>0.448447448  | 1.417646979<br>-1.464855879<br>-1.88144821<br>-1.77883547  |
| 5 - 10% less than current rate 0 -5% less than current rate Same as the current rate 0 - 5% more than current rate Safety consequences of equipmentfailure or system failure   | 3.269034771<br>0.036336367<br>-0.282298913<br>-0.226596941<br>0.025670718<br>0.511799013<br>0.498056839               | 0.934575967<br>0.757798123<br>0.8072466<br>0.783566162<br>0.865376278<br>0.508526422<br>0.654805507                               | 3.497880201<br>0.047949929<br>-0.349705917<br>-0.289186736<br>0.029664226<br>1.006435438<br>0.76063172<br>1.176574663                | 0.000669647<br>0.96184005<br>0.72720462<br>0.772963726<br>0.976386713<br>0.316337608<br>0.448447448  | 1.41764697:<br>-1.46485587:<br>-1.88144821:<br>-1.77883547:<br>-1.68863302:<br>-0.49558791:<br>-0.79909882:<br>-0.45164093:        |
| 5 - 10% less than current rate 0 - 5% less than current rate Same as the current rate 0 - 5% more than current rate Safety consequences of equipmentfailure or system failure Data privacy Self-driving vehicles not driving aswell as human drivers in general                                      | 3.269034771 0.036336367 -0.282298913 -0.226596941 0.025670718 0.511799013 0.498066839 0.660588795                     | 0.934575967<br>0.757798123<br>0.8072466<br>0.783566162<br>0.865376278<br>0.508526422<br>0.654805507<br>0.561450808                | 3.497880201<br>0.047949929<br>-0.349705917<br>-0.289186736<br>0.029664226<br>1.006435438<br>0.76063172<br>1.176574663<br>-0.07222075 | 0.000669647<br>0.96184005<br>0.72720462<br>0.772963726<br>0.976386713<br>0.316337608<br>0.448447448<br>0.241816251                               | 1.41764697<br>-1.46485587<br>-1.88144821<br>-1.77883547<br>-1.68863302<br>-0.49558791<br>-0.79909882<br>-0.45164093<br>-1.73624274 |
| 5 - 10% less than current rate 0 -5% less than current rate Same as the current rate 0 - 5% more than current rate Safety consequences of equipmentfailure or system failure Data privacy Self-driving vehicles not driving aswell as human drivers in general Learning to use self-driving vehicles | 3.269034771<br>0.036336367<br>-0.28298913<br>0.025670718<br>0.511799013<br>0.498065839<br>0.660588795<br>-0.061071477 | 0.934575967<br>0.757798123<br>0.8072466<br>0.783566162<br>0.865376278<br>0.508526422<br>0.654805507<br>0.561450808<br>0.845622305 | 3.497880201<br>0.047949929<br>-0.349705917<br>-0.289186736<br>0.029664226<br>1.006435438<br>0.76063172<br>1.176574663<br>-0.07222075 | 0.000669647<br>0.96184005<br>0.72720462<br>0.772963726<br>0.976386713<br>0.316337608<br>0.448447448<br>0.241816251<br>0.942552788<br>0.150575968 | 1.41764697' -1.46485587' -1.88144821' -1.77883547' -1.68863302' -0.49558791' -0.79909882'  |

### Residual Analysis

| 31                 |          |   |              |
|--------------------|----------|---|--------------|
| 32 RESIDUAL OUTPUT |          |   |              |
| 33                 |          |   |              |
| 34 Observation     | Predicte | ed How likely are you going to ride Uber's self-driving cars? | Residuals    |
| 35                 | 1        | 3.458197239   | 0.541802761  |
| 36<br>37           | 2        | 3.309407457   | 1.690592543  |
|                    | 3        | 3.81717015  | 1.18282985   |
| 38                 | 4        | 3.320073106   | -0.320073106 |
| 39                 | 5        | 3.475931741   | -2.475931741 |
| 40                 | 6        | 2.428567337   | -1.428567337 |
| 41                 | 7        | 3.320073106   | 1.679926894  |
| 42                 | 8        | 3.150227609   | -0.150227609 |
| 43                 | 9        | 3.806504501   | -0.806504501 |
| 14<br>55           | 10       | 3.255700803   | -0.255700803 |
|                    | 121      | 3.226731607   | 1.773268393  |
| 56                 | 122      | 2.598159146   | 0.401840854  |
| 57                 | 123      | 3.489664915   | -0.489664915 |
| 58                 | 124      | 2.854643362   | -1.854643362 |
| 59                 | 125      | 3.001437827   | -0.001437827 |
| 60                 | 126      | 3.965959932   | -0.965959932 |
| 61                 |          | 3.246031746   |              |
| 62                 |          |   |              |