

Spring 2019

Goodyear As-A-Service Project Report

Julie Mullet
juliemullet@hotmail.com

Please take a moment to share how this work helps you [through this survey](#). Your feedback will be important as we plan further development of our repository.

Follow this and additional works at: https://ideaexchange.uakron.edu/honors_research_projects

Part of the [Business Administration, Management, and Operations Commons](#)

Recommended Citation

Mullet, Julie, "Goodyear As-A-Service Project Report" (2019). *Williams Honors College, Honors Research Projects*. 981.

https://ideaexchange.uakron.edu/honors_research_projects/981

This Honors Research Project is brought to you for free and open access by The Dr. Gary B. and Pamela S. Williams Honors College at IdeaExchange@UAkron, the institutional repository of The University of Akron in Akron, Ohio, USA. It has been accepted for inclusion in Williams Honors College, Honors Research Projects by an authorized administrator of IdeaExchange@UAkron. For more information, please contact mjon@uakron.edu, uapress@uakron.edu.

The University of Akron: Williams Honors College

GOODYEAR AS-A-SERVICE PROJECT REPORT

TEAM WINGFOOT: Alexis Hanson, Cassandra Kemp,
Julie Mullet, Haley Riemenschneider, and Ryan Webb

Spring 2019

Abstract

The purpose of the Project Report is to explain our secondary and primary research findings, our analyses of these, and our solutions and recommendations as well as next steps for Goodyear Tire & Rubber Company in the “as-a-service” industry. The report begins with our secondary research finding, then moves into our primary research methods, statistical testing and data results, findings, and limitations of our primary research. We will then suggest our solutions and recommendations for the company based on our research. Last, we will detail our expected financial results for the company, as well as the action steps and future research they should consider.

Table of Contents

I.	Primary Research Methods	3
II.	Statistical Testing and Data Results	6
III.	Primary Research Findings	9
IV.	Limitations of Primary Research	11
V.	Solutions and Recommendations	12
VI.	Projected Financial Results	14
VII.	Action Steps	15
VIII.	Future Research	17
IX.	Conclusion	19
X.	References	20

Primary Research Methods

The first mode of data collection we used was an online survey to car owners to determine if our idea was marketable and to gauge the dollar amount people would be willing to pay for car services. Our main goal was to determine exactly how Goodyear Tire & Rubber Company might operate as a service. Our general idea was a subscription service for maintenance and tire replacement, as we saw in our secondary research that the market growth rate for subscription services is high and still growing.

First, we used a survey to gain opinions from a wide range of potential customers, from young drivers to elderly ones. We chose the survey method because of its quick results, large scale distribution, ease of data analysis, anonymity, and validity and reliability. We created and distributed the survey using Qualtrics, an online survey software program. It was distributed through various channels, including emails, texts, and social media sites such as Facebook and LinkedIn. We collected responses from 134 respondents.

The survey began with an explanation of its purpose, that it would take around three to five minutes to complete, and that the survey was anonymous as only group responses would be calculated. The main qualifying question we asked respondents was whether or not they owned or leased a car. Owning or leasing a car qualified them to continue with the survey, and their responses were recorded. The survey continued by presenting a situation where respondents were given the option to purchase a vehicle maintenance and repair subscription where they would be charged annually and would receive services for free or at a discounted rate. They were then asked to rate the importance of the following services: roadside assistance, oil changes, tire rotations, car washes and detailing, discounted replacement tires, filling tires with air, wiper

blade replacements, battery replacement, air filter replacement, and brake pads. We found that these were major sections of automobile maintenance and repair (Lombardo, 2018).

Next, respondents were asked to indicate the importance of extra features, including: adding more vehicles at a discounted rate, rewards program, referral program, and good grade rewards for student drivers. They rated these services and features on a five-point Likert scale ranging from “Extremely Important” with a value of 2 to “Extremely Unimportant” with a value of -2. Next, respondents were asked to write in any other services or features that they would want in a vehicle maintenance subscription. On another five-point Likert scale ranging from “Extremely Likely” with a value of 2 to “Extremely Unlikely” with a value of -2, we asked respondents how likely they would be to take advantage of at-home visits for certain services and how likely they would be to sign up for this type of subscription.

Through secondary research, we found that drivers spend around \$800 to \$1,200 annually on car maintenance and repairs with an annual average of \$660 (“Consumer spending on vehicles”, 2017). We wanted to see how much drivers would be willing to pay for a subscription service and if it compared to these prices. Respondents were informed of these average prices and were then asked what the highest amount they would be willing to pay annually for a vehicle maintenance subscription. The choices were as follows: less than \$90, \$90 to \$119, \$120 to \$149, \$150 to \$179, \$180 to \$209, and \$210 and up. Based on costing of car maintenance and repair, we believe these numbers would be an accurate range of pricing. Respondents were then asked the age of their vehicle, approximately how many times a year their vehicle is serviced, and what services their vehicle typically requires. Respondents were then asked if they currently used any roadside services, such as AAA, and on a five-point Likert scale ranging from

“Extremely Dissatisfied” to “Extremely Satisfied”, how satisfied they are with the services they receive from AAA or other roadside service companies.

Last, the survey asked questions about respondent demographics to see if there were any patterns between the types of responses and the types of people. The survey asked respondents gender, age range, household income, and the highest level of education they have completed.

A second mode of data collection was face-to-face in-depth interviews with potential customers to discover if this service is compatible with consumer needs. We chose in-depth interviews because of the flexibility in questioning and to gain a deeper understanding of the opinions of potential customers than we gained in the survey. The interview asked similar questions to the survey but allowed for further explanation of responses and discussions on what could make the subscription service better for customers. We conducted 13 in-depth interviews.

The interview began with an introduction and explanation on the purpose and nature of the research. Demographics questions of gender, age, and education were asked, followed by questions on vehicle specifics including if interviewees owned or leased a vehicle, how old the vehicle is, how many times a year the vehicle is serviced, and what services the vehicle typically requires. We then explained the situation that interviewees are given the option to use a subscription for vehicle repair and maintenance where they would be charged annually and would receive services for free or at a discounted rate. Interviewees were then asked, on a scale of 1-5 with 1 being not important at all and 5 being extremely important, the importance of the following services: roadside assistance, oil changes, tire rotations, car washes and detailings, discounted replacement tires, filling tires with air, wiper blade replacements, battery replacement, air filter replacement, brake pad replacement, family plan (or adding more vehicles

at a discounted rate), rewards program, referral program, and good grade rewards for student drivers.

The next section included open-ended response questions including: are there any other services or features interviewees would want in a vehicle subscription; would interviewees like the opportunity to have at-home visits for certain services; how likely interviewees would be to sign up this type of subscription service; why they would be unlikely to sign up; the highest amount that they would be willing to pay annually; how they would want to learn about the service or have it advertised to them; how they would prefer to use and monitor their subscription; and what features they would like a subscription app to have. The last interview questions asked if interviewees used any roadside services, about their experience with those services, and if they were satisfied with their experiences.

Statistical Testing and Data Results

After the survey and in-depth interview data collection process was complete, the results were exported to Microsoft Excel to begin the data analysis. For a frame of reference, 75% of the survey respondents were female, 24% were male, and 1% preferred not to answer. The survey was completed by people of all ages. About 28% of the respondents were between the ages of 18-22, 16% were 23-28 years old, 6% were 29-35 years old, 6% were 36-42 years old, 14% were 43-50 years old, and 19% were 51-60 years old, 11% were 61 years old or older. All types of income levels were fairly evenly represented. The majority of respondents had college degrees or were working to earn their college degrees.

As mentioned previously, respondents were asked to rate ten vehicle maintenance services on a five-point Likert scale of -2 to 2. The most important services on average to

respondents were oil changes (score of 1.157) and brake pads (1.035). This was followed by discounted tire replacements (score of 0.809), tire rotations (0.798), roadside assistance (0.748), and battery replacement (0.739). The lowest rated services were air filter replacement (score of 0.478), wiper blade replacements (0.452), filling tires with air (0.061), and car washes and detailings (0.052). On average, all ten of these services were rated positive numbers. This indicates neutral to important attitudes, as opposed to unimportant attitudes.

In addition to services, respondents were also asked to rate features of a potential subscription service on the same scale. A family plan, or the ability to add multiple cars to the same plan for a lower fee, was rated the most important with a score of 0.593. A good student discount for student drivers with good grades followed closely behind, with a score of 0.522. A rewards program, where subscribers receive extra benefits when they use the subscription more frequently, received a score of 0.319. A referral program, where subscribers earn rewards for referring their friends and family, received the lowest average rating of 0.142. Along with these features, respondents were asked if they would be likely to take advantage of at-home visits for certain services if registered for a vehicle subscription. Around 62% of respondents would be likely to take advantage of at-home visits for certain services. Fourteen percent of respondents felt neutrally on this feature, and 24% responded that they would be unlikely to use at-home service capabilities.

When asked how likely they would be to sign up for the subscription that was described, eight percent said they would be extremely likely to sign up. The majority of respondents, at 45%, said that they would be somewhat likely to register. Around 14% responded neutrally.

Twenty percent responded somewhat unlikely to sign up, leaving extremely unlikely with 13% of the responses.

Respondents were also asked about the price of the subscription. On the survey, the respondents were given payment brackets ranging from \$90 to \$210, based off AAA's pricing models (AAA, nd). They were asked to select the highest amount that they would be willing to pay for a vehicle maintenance subscription. The majority selected \$150 to \$179. Additionally, 18 respondents selected \$180 to \$209, and 20 respondents selected \$210 and up. In the in-depth interviews, this question was left open-ended. The answers ranged from \$200 and \$700, with an average of \$461.54.

The next section of the survey focused on the respondents' current vehicle information. Most respondents had cars between the ages of 4 to 7 years old (34% of responses) and 8 to 12 years old (37% of responses). Around 19% of the people who took the survey had vehicles between the ages of 0 and 3, and 10% had cars that were 13 years old or older. When asked about vehicle service habits, a quarter of respondents indicated that they had their cars serviced once or twice a year. Over half of the respondents indicated that their cars were serviced three to four times per year. Fifteen percent selected five or six times a year. Only six percent said that their cars were serviced seven times a year or more. Respondents were given the ability to type in the typical services their vehicles require. The most popular services mentioned were oil changes with 90 responses. Tire rotations was stated 31 times. Other frequent services indicated were brakes (18 responses) and routine repairs (14 responses).

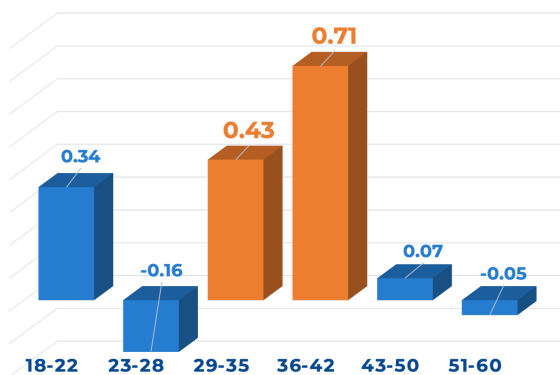
Additionally, respondents were asked if they currently use any roadside services, such as AAA. The responses were fairly even with 53% of respondents already using roadside services

and 47% not involved with these types of services. They were then asked about their satisfaction with their experiences using AAA or other competitors. The overwhelming majority (81%) were satisfied. Fourteen percent were neither satisfied nor dissatisfied, and five percent felt some degree of dissatisfaction.

In the in-depth personal interviews, participants were asked how they would want the subscription service promoted to them. The popular digital channels mentioned were email advertising and social media ads, such as Instagram ads and Facebook ads. Traditional methods were also preferred, including mail and television commercials. In addition, participants wanted the ability to learn more details through referrals and at service centers through pamphlets or talking to employees.

Primary Research Findings

There were a few major findings from the primary research. The data showed that the older millennials were most interested in the idea of a vehicle service subscription. This demographic had the highest likelihood to sign up for this service. When asked how likely they

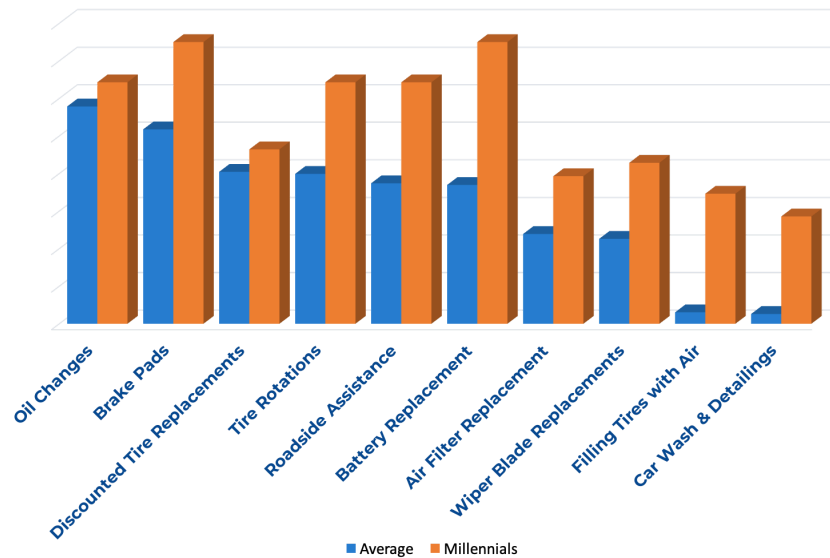


*Figure 1: Likelihood of Joining
Vehicle Maintenance Subscription*

would be to sign up for a vehicle subscription, the respondents who were 29 to 35 years old averaged a score of 0.43 and the respondents who were 36 to 42 years old averaged a significantly high score of 0.71. The remaining age ranges were all much lower with 23 to 28 year olds and 51 to 60 year olds averaging negative scores. This indicates these age ranges are unlikely to want this subscription

available to them. We were pleased with our findings in this area, as our target market is the millennial generation, since we found in our secondary research that this age group is the main demographic of buyers of subscription services (Columbus, 2018). This age demographic also rated the importance above average for each of the ten services mentioned in the survey; *Figure 2* shows this. The overall average of all survey respondents is represented by the blue bars. The average of all 29 to 42 year old respondents is represented by the orange bars. Millennials indicated a higher level of importance for each of these services. Many of them are significantly higher than the average.

Figure 2: Opinions of Millennials vs. Other Ages



There were negligible variation between males and females. Additionally, income did not have a significant impact on the results, as there was interest shown among all income levels. A factor that did correlate to the likelihood of signing up for the subscription was the age of the car. Owners of cars that are 8 to 12 years old showed the greatest interest in this service. This was

followed by people who own cars that are 4 to 7 years old. On the other hand, owners of newer cars (0 to 3 years) indicated neutral attitudes and owners of older cars (13+ years) responded unlikely to subscribe.

These major findings highly influenced the creation of our plan for Goodyear, which will be explained further in the next few sections.

Limitations of Primary Research

There were several limitations discovered during our primary research. One limitation we found was our inability to get a large geographic pool of respondents for our survey. Most of our respondents were from the Akron area, most likely family, friends and fellow students at the university. This is considered a limitation because our subscription service proposal would eventually become a nationwide service for Goodyear to offer and much of our data is only from the Ohio and Northeast region of the country. We do not have data to support that our subscription service would be successful in other regions of the country outside of the Akron, Ohio area.

Another limitation we faced during our primary research is the gender of the survey respondents. Our respondents were only 24% male so we do not have an accurate representation of what one of the other largest genders would like to see in a Goodyear subscription service. Ideally, we would have closer to 50% even representation from both male and female to help understand what the general population of the country thinks about the service. We were not able to control the gender of respondents who took the survey, so it was just up to chance and the insufficient balance of participants could have an impact on the results.

One more limitation to our primary research was time due to the semester only being 15 weeks long. We were only able to have our survey out for 2 weeks so we could not wait for more respondents before we had to analyze the results. The timeline of the project didn't allow for the survey to be out for very long because the team had to wait for feedback for our secondary research report and complete that as well. We also had to develop the questions we thought would best help us identify if respondents would actually be interested in the idea and how to find out what services or features they would want in the subscription. So the time has just been a general limitation to us in this project. All of these limitations were big factors in how we were able to conduct our research and who we were able to reach for research.

Solutions and Recommendations

Based on our key research findings, our team has come up with a few recommendations and solutions as to how Goodyear might operate as-a-service. From our secondary research, we found that many companies are opting for "business as-a-service" models because of the rise in popularity and the flexibility of this model to be used in many industries (Rajgopal, 2018). Business as-a-service models capitalize on convenience, bringing the product or service to the consumer without disrupting their everyday lives. We found that millennials enjoy this hassle-free business model. Because millennials are the largest generation in the United States right now, our team decided to focus on an area where they are most likely to spend their money.

Our team's recommendation is that Goodyear should create a service subscription that would benefit them as well as their customers. The solutions for this recommendation were taken from data collected from primary and secondary research reports, survey and in-depth interviews. We suggest the name "Goodyear Premier" for this subscription service. It suggests a

high level of service and premier benefits, while still marketing the Goodyear name. We believe this name will be beneficial to the branding of the subscription plan. Most subscription services have different levels, so based on this, we have concluded that Goodyear Premier should have three levels; the Basic Plan, the Blue Plan, and the Gold Plan. With the purchase of any of these plans, customers would be able to receive services for free or at a discounted rate. Using data from our survey results, our team decided which services were the most basic and which customers would be willing to pay premium pricing to use. The Basic Plan, costing \$320 per year, includes oil changes (three per year), tire rotation, roadside assistance and towing up to three miles, car washes and detailing, filling of tires and free flat tire repair. The Blue Plan, costing \$440 per year, includes everything in the Basic Plan, as well as towing up to 10 miles, discounted tire replacement of 10%, brake checks, wiper blade replacements and unlocking doors. The Gold Plan, costing \$560 per year, includes everything in the Basic and Blue Plans, as well as towing up to 100 miles, a 20% discount on replacement tires, loaner cars, brake pad replacement, air filter replacement and battery replacement.

While these prices may seem high to consumers, we are confident that Goodyear Premier is accurately priced, since Goodyear would be offering a premium maintenance and repair plan to their customers. There are currently no other companies offering subscriptions with this level of service and discounted offerings. The service is more than just a towing service such as AAA; it offers many more features. As mentioned previously, car owners spend on average over \$600 annually already, and this subscription plan offers many costly services at a lower price than this. Because of this, we believe Goodyear can premiumly price their subscription.

Our research findings showed that millennials, and the generations that come after them, are looking for ways to be constantly connected to companies with whom they do business. Our team believes that with Goodyear Premier should come a phone app. Staying connected through an app would make managing and tracking a customer's service plan very convenient and fast, which is exactly what the generation is seeking in services. We used our in-depth interview data to develop some of the features that customers would like to have in this app. Vehicle maintenance history, paying through the app, tracking the progress of the vehicle's maintenance, finding the nearest location and answers to frequently asked questions were among the top features that customers would like to see. In the next sections, we will detail our predicted financial results and action steps Goodyear should take to implement Goodyear Premier.

Projected Financial Results

To develop the pricing strategy for the three subscription plans, we utilized the average cost per service to discover the actual value of the plan. With this information, we were able to set the annual price as follows, Basic Plan \$320, Blue Plan \$440, and Gold Plan \$560. The subscription service should be initially launched in the Great Lakes/Midwest Region. We believe this is the most profitable market for this type of service.

We expect the highest cost of the proposed plan to be the advertising costs. In 2018, Goodyear's advertising budget was \$345 million, compared to \$320 million in 2017 and \$355 million in 2016 ("Goodyear Tire", 2018). We propose an advertising budget of \$5 million to launch the program, which could come from an overall increase of the total budget or a reallocation of the current budget. Our primary research shows that the best means of marketing would be commercials and social media ads and influencers. Another crucial cost of the

proposed plan is the initial cost of the creation of the app that customers would utilize for the plan. We expect the cost of the app creation and maintenance to be around \$500,000. Many of the other costs associated with launching a program such as the one proposed are already covered by Goodyear. Almost all of the services within these plans are already services being performed by Goodyear service centers. In the initial launch of the program, we propose that Goodyear utilize a network of local towing services. In future years, it may become more profitable for the company to develop their own towing fleet, but we do not see that within the first three years.

Action Steps

The first step Goodyear needs to take is to perform further primary research on the idea of a subscription service. We were limited by our respondents all being local and only having a limited time of one semester to perform primary research, but Goodyear has the resources and nationwide brand recognition to attain more information. The company can get responses from respondents across the country through having a survey available to take online or in their stores while customers are waiting on the maintenance of their vehicles. Perhaps the company could offer a coupon to customers who complete the survey as an incentive. Goodyear can also conduct additional focus groups to find out what is most important to potential subscribers. Future research steps will be explained further in the next section.

The next step is making the app. As stated above, we believe an app is the best way to maintain contact with subscribers or potential subscribers. Creating a simple-to-use app will be a critical part of the service because it will be the face of the service. The features included would be finding the nearest service centers in the user's area; scheduling appointments; viewing

estimated wait times of services; tracking the progress of the user's vehicle maintenance as it is being done; linking a credit or debit card to pay through the app; sorting services by preference such as cheapest or highest quality; viewing maintenance history, receipts, statements, and parts; receiving service reminders; tracking rewards; reviewing subscription details; seeing Goodyear promotional materials; and reviewing a Frequently Asked Questions (FAQ) section. Figure 3 displays a potential design of app features.

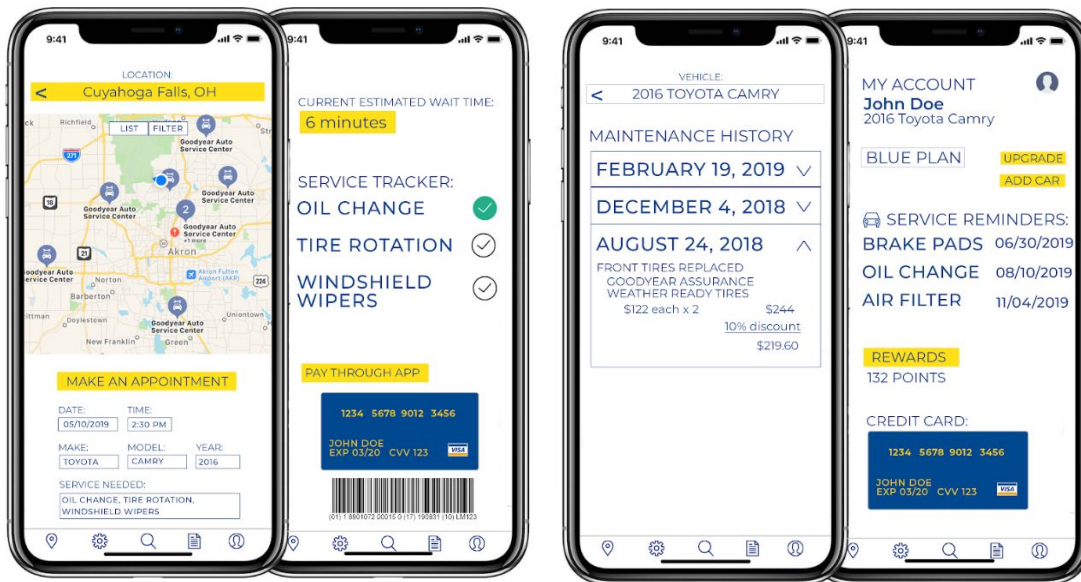


Figure 3. App Design and Features

Marketing the service will be a huge step as well. We found that there are a wide variety of ways in which people like to be marketed. Generations older than millennials prefer the more traditional methods of marketing like mail advertisements, television commercials, or word of mouth. Younger generations prefer methods like Instagram and Facebook ads. Informational pamphlets and Goodyear service center employees mentioning the service are also very good ways to advertise the service. Since the millennial generation is the target market of Goodyear Premier, we suggest that 75% of marketing efforts are geared towards this age range and ages

below, and 25% are aimed at the generations older than millennials. The marketing campaign will be a major step in the process and will also be relatively costly. As mentioned previously, we recommend that the company allocates \$5 million in yearly marketing to the subscription service. With a subscription service, marketing only needs to be geared toward new customers, since current customers will have already purchased the product for the year and foreseeable future after that. Additionally, marketing should mainly be done in the Northeastern U.S. to households with an income between \$50,000 and \$100,000, as we found that this demographic is the most likely to purchase a vehicle subscription service (Columbus, 2018).

A final step would be the training of employees in service centers on the features of the subscription and the use of the app. Since employees in the service centers would be the ones using the app directly, they must be trained thoroughly on its use. Service center employees would need to update the progress of maintenance on the customer's vehicle as well as estimated wait times. Additionally, the employee would need to be able to answer any questions about the use of the app that customers might have. For ease of use on the floor, employees may benefit from the use of portable tablets to update progress of maintenance, estimated wait times, and tracking their customers' services.

Future Research

A first step in future research for Goodyear in the application of our plan is to gain more information through a survey from respondents across the country, not just the local area. Since the Goodyear tire brand is widely known in the United States, the company can provide a survey for customers to gauge their interest in this type of app and service subscription. This will give

insight into the wants and needs of a larger population and wider set of demographics than we surveyed.

The next step for research for the company is to experiment with providing this service subscription in a small test environment. The best test environment would be in the local Akron area since brand awareness of Goodyear is high and the proximity to the headquarters will allow a tight control of the test market implementation. Those users would then need to be surveyed and interviewed on their use of the app, how it could be improved, additional services they might need, and any other recommendations that they could provide to improve the service. Goodyear would also want to group these respondents by demographics to reveal which groups of customers enjoy the service the most and would pay the most for the service. With this research, Goodyear would have the ability to develop a marketing plan for the service that targets these customer groups and would be able to tailor the subscription to reap the most financial benefits possible.

More in-depth research should also be done on the cost of providing this type of service, as we were able to find general prices for services and maintenance, but we are not able to provide exact costs and profits the Goodyear would accrue from providing their products and services in the as-a-service industry. The company should perform research on costs of advertising, development of a towing service, development of at-home customer visit appointments, and development of the phone app itself on different platforms such as Android and iOS.

Conclusion

We would like to sincerely thank everyone at Goodyear for entrusting us with company information and allowing us to provide insight to the problem with which we were presented. We would like to especially thank Greer Connor, Rodrigo Ciossani, and John Brainerd for their cooperation during our correspondence and for presenting us with the project. We would also like to thank the company for allowing our team to visit and tour the Goodyear Headquarters. We hope our research, solutions, and recommendations benefit The Goodyear Tire & Rubber Company and aid the company in moving into the service industry.

References

AAA. (n.d.). AAA Fact Sheet. <https://newsroom.aaa.com/about-aaa/aaa-fact-sheet/>

Columbus, L. (2018, March 04). The State Of The Subscription Economy, 2018.

<https://www.forbes.com/sites/louiscolombus/2018/03/04/the-state-of-the-subscription-economy-2018/#29a8aa0153ef>

Consumer spending on vehicles averaged \$8,427 in 2016 (2017, September 11). Bureau of Labor Statistics.

<https://www.bls.gov/opub/ted/2017/consumer-spending-on-vehicles-averaged-8427-in-2016.htm>

Goodyear Tire & Rubber Company. (2018). 2018 Annual Report.

<https://corporate.goodyear.com/documents/annualreports/2018-annual-report.pdf>

Lombardo, C. (2018). Auto Maintenance and Repair Franchises in the U.S. IBISWorld Industry Report OD5578.

<https://clients1-ibisworld-com/reports/us/industry/default.aspx?entid=5578>

Rajgopal, R. (2018, June 22). Deliver What Millennial Consumers Really Want: Convenience.

CMS Wire.

<https://www.cmswire.com/customer-experience/deliver-what-millennial-customers-really-want-convenience/>