The University of Akron Williams Honors College

Team Wingfoot - Goodyear As-A-Service

Secondary Research Report

Alexis Hanson, Kassandra Kemp, Julie Mullet,
Haley Riemenschneider, and Ryan Webb

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Abstract

The purpose of this Secondary Research Report is to collect information and gain knowledge about the tire manufacturing industry and The Goodyear Tire & Rubber Company. We will use this information to find ways that Goodyear can compete in the “as-a-Service” space in the tire industry. The report will begin with information about the industry as a whole, including the major players, the functions that the industry offers, and industry performance. Then, we will evaluate service industries such as oil change, auto service and maintenance, and mobility services into which Goodyear has the potential to expand. After that, we will provide information about The Goodyear Tire & Rubber Company, including what products and services they offer, their performance as a company, and the future of the company as both a manufacturing and service industry. Last, we will provide a competitive analysis of the company and information on operations in the “as-a-service” realm of doing business.
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Industry Information

The tire industry is expansive, complicated, and very necessary to companies and their customers around the globe. In this section, the major players, the functions of the tire industry, the products that the industry offers, and industry performance will be described.

The major players in the tire industry are Compagnie Generale Etablissements Michelin, with a market share of 23.4%; Bridgestone Corporation, with a market share of 22.4%; The Goodyear Tire & Rubber Company, with a market share of 12.7%; and Cooper Tire & Rubber Company, with a market share of 6.4%. These top four companies in the industry collectively generated about 65% of industry revenue in 2018 (Lifschutz, 2018).

The main functions of the tire industry include pneumatic, semi-pneumatic, and solid-tire manufacturing, inner tube manufacturing, motor vehicle tire manufacturing, tire repair, and aircraft tire manufacturing. Pneumatic wheels are similar to standard car tires, where an outer rubber wheel is attached to a rim and air is forced inside to create pressure; a semi-pneumatic wheel is not under pressure and is made of thick rubber with a hollow core. These types of wheels are used in larger vehicles such as commercial freight trucks (Pneumatic VS Semi-Pneumatic Wheels, n.d.).

The major products that the tire industry offers are passenger vehicle tires, midsize- and heavy-truck tires, tractor and implement tires, and all other vehicle tires (Lifschutz, 2018). As displayed in Figure 1.2, the majority of products that the industry offers are passenger vehicle tires, comprising 62.8% of the offerings. Following that are midsize- and heavy-truck tires at 28.4%, tractor and implement tires at 4.0%, other vehicle tires at 3.4%, and miscellaneous products at 1.4%.
The major markets of the tire manufacturing industry are independent tire dealers, holding 46.7% of the industry’s total revenue. Independent tire dealers are followed by exports at 24.0%, mass merchandisers and warehouse clubs (such as Costco and Sam’s Club) at 15.6%, auto dealerships at 6.8%, tire company stores at 4.9%, and miscellaneous at 2.0%, as displayed in Figure 1.1 (Lifschatz, 2018). Goodyear is a tire manufacturing industry that also sells their merchandise through tire company-owned stores, thus retailing directly to customers throughout the U.S.

In the current period, the tire manufacturing industry in the United States is expected to accrue revenues of $17.8 billion. This is a drop from past revenues by about 2.3% due to falling global rubber prices and the increase of foreign competition. Tire manufacturers in the United States have suffered from this competition, and the U.S. imposed import tariffs on Chinese tires in 2015. These tariffs were removed in 2017. Foreign competition has even outweighed increasing demand for tires which ultimately caused the revenue drop mentioned previously. Although there has been a drop in revenues, in the next five years until 2023, industry revenue is
expected to increase in the U.S. because unemployment is low and incomes are rising (Lifschutz, 2018).

The industry’s revenue depends on sales of replacement tires and tire sales generated from original equipment manufacturers. Consumers need replacement tires as their vehicles age and they put more and more miles on their cars. The per capita disposable income has been increasing, and is expected to increase 1.9% annually, and in turn, there has been an increase in the number of total vehicle miles driven. Americans have been increasing the number and length of their non obligatory trips since they have more money to spend to their discretion, which has increased tire demand and helped bolster revenue (Lifschutz, 2018).

Trends within the industry have also changed in recent years as consumer preferences have evolved. Budget-conscious and environmentally-friendly consumers demand tires that they will need to replace less often and that will increase the miles-per-gallon fuel efficiency of their vehicles. This has opened doors for tire manufacturing companies to become more innovative and accommodate the requests of their customers. For example, some companies have invested in technologies to manufacture low-roll resistance tires that aid fuel efficiency (Lifschutz, 2018).

The overall performance of the tire manufacturing industry will directly influence The Goodyear Tire & Rubber Company. In the next part of this report, the nature of the auto service, maintenance, and repair industry will be discussed.

Auto Service, Maintenance, and Repair

Auto service, maintenance, and repair can be segmented into six major sections that make up the industry: major body and mechanical repair services (41%), oil change and lubrication
(31.1%), painting and other body repair services (18.9%), transmission repair (6.3%), mechanical and electrical repair (1.4%) and other repair services (1.3%) (Lombardo, 2018).

**Oil Change Retail**

Oil change retail is a major section of the automobile industry. With an annual revenue of five billion dollars, oil change retail is an important focus for many local and national companies. As the amount of drivers on the road continues to grow, oil change retail is expected to increase as well (Lo, 2018b).

There are many competitors in the market. Consumers have both local and national oil change retailers available to them. Many of these competitors offer significant discounts to try to win new customers and retain old ones (Lo, 2018b). The oil change retail industry is very price competitive. In fact, some places, such as dealerships or repair centers, may even offer free oil changes. Another challenge comes from full auto service locations.

Problems also arise for retailers from the consumer end as well. About 55% of car owners say they always get the oil changed at the recommended intervals (Lo, 2018b). However, that means 45% of car owners delay changing their oil beyond the suggested mileage.

Most people visit the same retailer for every oil change necessary, as well as get their oil changed at the suggested time. Around 28% schedule their oil changes over the phone, while 19% do not book in advance. Just less than a quarter of respondents will leave and return if the wait time is more than an hour. Finally, less than 20% of car owners have the knowledge to change their own oil (Lo, 2018b).

The majority of consumers are habitual when it comes to oil changes by going to the same place for every oil change and going at the suggested intervals. Also, 28% of consumers
already use this technique. Having a short wait time is also important to consumers; a quarter of consumers will leave if the wait time is longer than an hour.

There are a few solutions that oil change retailers implement to combat these issues. Retailers advertise the availability of synthetic oils that are longer lasting than other oils. However, the longer the intervals between oil changes extend, the more important it is to get an oil change when recommended (Canter, 2018).

New trends in the market include the introduction of vehicles that require less oil and advances in motor oil that increase their longevity. As a result, the mileage between oil changes has doubled in some instances. Ironically, these innovations are not beneficial to oil change retailers because they result in less frequent customer visits. Thus, it is more important than ever to retain customers and acquire new ones. However, experts do not believe that increasing oil change intervals will be at the forefront of upcoming innovations. They believe that OEMs are more concerned with creating technologies pertaining to electric vehicles and fuel cells, rather than oil changes. The longevity of oil will proceed to grow naturally as innovations occur. Yet, time and resources are being more heavily focused elsewhere (Canter, 2018).

As mentioned previously, Americans are using their cars more often than ever. Factors that contribute to the increase of driving include “high employment, consumer confidence, and low gas prices” (Lo, 2018). This provides great opportunities for oil change retailers because the more Americans drive, the sooner they will need to get their oil changed.

**Maintenance and Repair**

Vehicle maintenance and repair is a large portion of the car care industry. Car manufacturers include with vehicles a recommended schedule of maintenance events that a car
will need over the course of its lifetime. There are main two types of vehicle maintenance, preventive and scheduled. This schedule typically sets time parameters based on the number of the miles the car has traveled. These maintenance events can be as small as adjusting fluid levels to servicing a transmission. In 2016, the average American consumer spent $660 annually on maintenance and repairs for the vehicles. The spending varies based upon the consumers’ ages, but data shows an above average amount of spending for consumers over 35 years old. This trend could be influenced by the types of cars that these consumers typically own and lease. Typically members of these age brackets own more or buy pricer vehicles than those in the surrounding age brackets (“Consumer spending on vehicles”, 2017).

As mentioned previously, the auto repair and maintenance is a $67.2 billion industry and encompasses a wide variety of services. However, it does not include oil changes in the statistical analysis. Scheduled and preventive repair and maintenance services account for an expected 23.7% of the industry revenue in 2018, making up the largest segment of the industry’s services. The next highest service is powertrain repair, which accounts for an expected 22% of the industry revenue. Powertrain repair includes the engine, transmission, suspension, wheels and other parts.

Vehicle maintenance behaviors are also greatly influenced by the age of the vehicle. In research conducted by the NPD Group, owners of older car owners (11+ years) are more likely to spend more than $1,000 on their vehicles. This trend is consistent with the expected costs and repairs that would occur with an older vehicle. Owners of older vehicles also display more desirable maintenance behaviors compared to those with younger vehicles (0-3 years). These behaviors show a higher likelihood to do additional maintenance activities.
Prices and Frequencies of Car Services

The services can be segmented into six major sections that make up the industry: major body and mechanical repair services (41%), oil change and lubrication (31.1%), painting and other body repair services (18.9%), transmission repair (6.3%), mechanical and electrical repair (1.4%) and other repair services (1.3%) (Lombardo, 2018). Most auto professionals say that a car should get its regular “check-up” every six months (Ilton, 2019). This check-up involves getting the brakes, belts, fluids, wipers, filters and more looked at by a trained professional. Vehicle owners assume that getting their car checked up on will be too costly to do. Most basic car services start at less than $100.00 a year (Arata, 2017). Modern cars are so updated and advanced that they need very limited regular maintenance.

When vehicles are taken in for scheduled maintenance, drivers expect a certain price point for each of these basic services. Prices for these services are determined by the age of the car, how often it’s driven, and how much repair is necessary to keep the car safe. Oil changes can cost anywhere from $20-$100 for the average vehicle and should be done every 5,000 to 7,000 miles. Tire rotations should occur every 3,000 to 7,000 miles or every time your oil is changed, and can cost anywhere from $20-$50 (Arata, 2017). Some service retailers even offer this as a free service with the purchase of an oil change. Other common services include tire replacement, wiper blade replacement, air filter replacement, and brake pad replacement. The frequency of tire replacement can vary, depending on how much the car is driven. Modern cars are driven enough miles each year that the tires on the vehicle will need to be replaced before the age of the tire becomes a safety issue (U.S. Tire Manufacturers Association, 2019). The cost of tire replacement ranges from $50-$300 per tire (Arata, 2017). Wiper blades need to be replaced every 6-12
months; this costs anywhere from $7-$15. The air filter should be replaced every 20,000-60,000 miles and costs $25-$100 (Liberty Mutual, n.d.). Brake pad replacement is more costly than other basic services. The cost to replace them ranges from about $110-$400. This replacement also does not have a specific time frame as to when they should be replaced. Newer cars have built in technologies that alert the driver when their brake pads need changed. Every 10,000 miles a mechanic should perform a visual inspection on a vehicle’s brake pads (YourMechanic, n.d.).

According to a report from IBISWorld, the auto maintenance and repair industry is expected to increase by 1.2% from 2018 to 2023 which is over $100 million. There is an expected increase in the number of total miles driven, number of vehicles registered, disposable income and demand from car manufacturing that will increase the need for repairs and maintenance for vehicles (Lombardo, 2018). Thus, there is plenty of revenue for Goodyear to earn in the repair service industry. The industry is growing slowly, but there is plenty of opportunity to take a larger share of the market.

Ride Sharing and Car Sharing

Ride sharing and car sharing are innovations that are changing the way consumers travel. Car sharing is an alternative to owning a car that allows people to schedule a short-term car rental. (Cheng, Chen, Ding, & Zeng, 2019). Ride sharing is a system where people schedule a ride with a private driver to specific destination (Lasky, 2019). These innovations are the result of the smartphone boom in the United States. Ride sharing services, such as Uber and Lyft, are successful because they offer more convenience and better user experience than other mobility services (Bolton, 2015). The entire ride sharing trip and transaction is completed through a
mobile app. These apps allow consumers to arrange a ride in a few clicks. Users follow the course of the driver and are notified when the driver arrives. Additionally, users pay for rides through the phone.

For some consumers, using these services is more suitable and affordable than other alternatives. The most important attributes to consumers are that the method be the most reliable, the most convenient, and safest way to travel. The second tier of important attributes include the fastest, the most practical, and the most comfortable (Lo, 2018a). Ride sharing improves travel conditions in urban areas. Consumers in cities save money and time by using ride sharing compared to owning a vehicle. Car owners experience costs when searching for parking spots, as well as add to the traffic congestion for other drivers (Winston, 2013). In addition to alleviating traffic congestion, ride sharing improves air quality in large metropolitan areas (Agatz, Erera, Savelsbergh, & Wang, 2011). If the occupancy rate of each ride is increased, the benefits are more substantial. The average number of occupants in a rideshare in New York City is 1.2. If that number is increased to 3, it will result in reduced travel distances of 55% and decreased carbon emissions of 725 metric tonnes per day (Lokhandwala & Cai, 2018).

As shown in Figure 3.1, ride sharing is becoming more popular than car rental and tax services. However, 41% of people involved in this study do not use any of these modes of mobility service (Lo, 2018a).

Figure 3.1

Ride sharing continues to become a more frequently used form of transportation. In study conducted by Mintel involving 2,000 internet
users over 18 years old, 18% reported using ride sharing in the past twelve months as of April 2016. From then to November 2017, the percentage of people who used ride sharing increased to 30% (Lo, 2018a). However, the attitudes of U.S. consumers are still in favor of owning cars, as opposed to using carshare or rideshare. Around 62% of car owners think that “a personal vehicle is best for a regular commute” (Lo, 2018a).

Ride sharing is becoming a more effective and efficient way to travel in metropolitan areas. The capacity utilization rates of Uber are higher than the rates of taxis in the five major U.S. cities of Boston, Los Angeles, New York, San Francisco, and Seattle. The rate is a measurement of “the fraction of time that drivers have a fare-paying passenger in the car or by the fraction of miles that drivers log in which a passenger is in the car” (Cramer & Kruger, 2016). Uber drivers have a customer in their vehicle more often than taxi drivers due to more advanced technology, more drivers available, strict taxi regulations, and flexible labor supply and demand model (Cramer & Krueger, 2016).

Ride sharing behavior was also examined; the study involved 597 internet users over the age of 18 who had all used ridesharing in the past 12 months. The majority of respondents use ride sharing when they are on vacation. Many said that they prefer to use ride share instead of renting a car. Many reported that the reason they use ride share is because it is more environmentally friendly than other means of travel. About 29% of people said that they use the shared services of ride share apps to save money (Lo, 2018a).

Marketing to Millennials

The largest generation in America right now is the Millennials. These are people aged 24-41. The majority of millennials’ top four priorities are family time, spending less money,
simplifying their lives and traveling (Mintel, 2018). All of these concepts can be used to help create new ‘as-a-service’ products.

Forty-five percent of millennials say that social media posts encourage them to try new things. This means that millennials are 56% more likely than average US consumers to agree with this statement.

Millennials are currently making more than the average household income. Within the next decade or so, millennials will be at their peak earning potential. Therefore, this would be the ideal time for companies to try to appeal to the largest generation in the United States. The generation that is having to stretch their money the most are the younger millennials. The age group of younger millennials is looking to save money on anything they can. Millennials have a focus on products with a more positive effect on the environment. 47% of millenials are willing to pay more for products, services and brands that are considered to be environmentally friendly (Smith and Brower, 2016). A company’s reputation and advertising about the environmental friendliness of a product are the most influential factors to consumers. The largest target of environmental millennials is females as they are more apt to research the products.

Millennials grew up within the digital era and they use technology more than any other generation. Coupons are the most popular mode of online advertising among that group (Smith, 2012).
Seventy-one percent of millennials were motivated to revisit a website if the company had competitive prices. *Figure 4.2* shows how millennials are also looking for good shipping rates, rewards, and gifts as some of their top reasons for returning to a website.

**The Goodyear Tire & Rubber Company Information**

**Innovations**

Goodyear has created a new prototype tire that is more environmentally safe. The Oxygene tire has “living moss that grows inside its sidewall to absorb exhaust pollutants while the car is in motion.” The moss on the inside turns carbon dioxide into oxygen through photosynthesis. This eliminates many of the harmful pollutants that reduce air quality. Additionally, the outside of the tire is made with recycled rubber. Goodyear claims, “In a city with approximately 2.5 million vehicles, the Oxygene tire has the capacity to generate 3,000 tons of oxygen and absorb more than 4,000 tons of carbon dioxide per year” (Mayles, 2018).

Electric cars have become a huge trend for becoming more environmentally friendly. However, these vehicles are often too expensive for consumers. The Oxygene tire could provide the same environmental benefits on a traditional car. Although the Oxygene tire may cost more than other tires, it will save the driver money with its fuel-efficiency.

“With 66% of the world population expected to live in cities by 2050, the number of cars on urban roads is expected to increase substantially, exposing city dwellers to higher levels of harmful exhaust emissions” (Mayles, 2018). Eco-friendly tires and similar innovations can work to improve air quality in these cities.
Competitive Analysis

The tire manufacturing industry in the United States is currently at a medium level of competition. The top four competitors in the industry account for 65% of the market. There is a trend of increasing competition among the major players in the industry. The major points of competition are centered around price, quality, company reputation and brand recognition. The cost of the raw materials can have an affect on the pricing of the product especially for the smaller companies that compete by low cost products. Brand recognition pays a large role in the process of buying products or deciding where to get a vehicle serviced. It is becoming more important for the major players in the tire industry to provide product differentiation such as higher performance tires. Globalization is also very high and increasing in the industry. The two major companies in the industry that are American-based, Goodyear and Cooper Tire, moved their operations abroad to the most cost-effective location to manufacture to help increase profits (Lifschutz, 2018).

SWOT Analysis

Strengths

Goodyear has many strengths that allow it to compete as one of the biggest companies in the tire industry. Goodyear has very strong brand image. It is one of the most recognized brands in the tire world. It also owns many other tire brands that allow it to control an even larger market share. The company sold 159.2 million units of tires in 2017 with 113.5 million being replacement tires (Marketline, 2018). Goodyear also offers commercial truck and tire retreading services. Another strength is the company’s global presence. There are 48 manufacturing facilities spread over 22 countries. Goodyear gets its resources and workforce locally allowing
the company to maximize profits along with a global and local presence. The company also has many storefront locations where it gets general car maintenance and repair business. This is an advantage because the company already has a base of loyal returning customers who would potentially be interested in their subscription service. One more strength is the Oxygene tire mentioned above. This tire is an innovation that will be attractive to many people especially those concerned about the environment. Finally, Goodyear invests a lot into research and development. The company invested $406 million in 2017 into R&D. As of the end of 2017 Goodyear had 5,700 (2,000 U.S.) product, process and equipment patents globally with about 2,300 (400 U.S.) patents pending (Marketline, 2018).

Weaknesses

One of Goodyear’s biggest weaknesses is its low liquidity compared to competitors such as Apollo Tyres Ltd., Bridgestone Corporation, Michelin, Continental AG, Cooper Tire and Rubber Company, Hancock Tire Co. Ltd, and others. The company had $5,025 million in current liabilities in 2017, up 4.3% from 2016. It has a lower current ratio than its major competitors at 1.2 (Marketline, 2018). This limits Goodyear’s ability to fund daily operations or look for opportunities for growth. Another weakness for Goodyear is legal proceedings. According to a Marketline report at the end of the year in 2016 Goodyear had 64,400 claims pending against them because of allegations of asbestos related injuries caused by exposure to asbestos in Goodyear manufactured products and aircraft braking systems (Marketline, 2017). The company has spent $517 million in 2016 on settlements and other accrued costs because of these allegations (Marketline, 2017).
Opportunities

Goodyear did research on the global tire and rubber market and found growth from 2016 to 2017. They predict the market to continue growth and have calculated a compound annual growth rate (CAGR) of 4.2% for 2016-2020 which would growth the market to $320.2 billion at the end of 2020. There is also predicted growth in the global automotive industry which benefits Goodyear in many ways as well. The predicted CAGR for the global automotive industry from 2016-2020 is 4% so Goodyear will be able to benefit from that growth too (Marketline, 2018). Currently, Goodyear only has a 12.7% market share in the tire industry as stated above in the Industry Information section of this report (Lifshutz, 2018). Goodyear can potentially grow its market share by adding more service oriented innovations to its name. None of the other top competitors in the tire industry have any sort of subscription service so Goodyear would be a leader in adding this service.

Threats

Goodyear is currently facing a few threats. High regulations and increased competition are two of the biggest threats. Goodyear must comply with regulations in the United states and abroad that can have an affect on the production costs and therefore affect earnings and profits. In the U.S. the TREAD (Transportation Recall Enhancement Accountability and Documentation) act and in the European Union the REACH (Registration, Evaluation, Authorization and Restriction of Chemical substances) regulation affect Goodyear because of the threat of breaking the law and hurting the company reputation. Goodyear is working to make sure they comply with these regulations by obeying international and national laws and regulations in every country the company is doing any business in.
Increased competition in the tire industry is also threat for Goodyear. Goodyear competes in many areas in the industry including “product design, performance, price and terms, reputation, warranty terms, customer service and consumer convenience” (Marketline, 2018). Some of the company’s competition is larger and has more financial resources than Goodyear does. Two of its biggest competitors worldwide are Bridgestone and Michelin, and there are many others as well. The smaller regional companies Goodyear competes with have more access to the resources of the region creating more challenges for the company. Also, the cost of rubber has dropped globally and there is increased foreign competition which is a major external threat to the company because revenue will decrease for American companies that operate globally.

**Service-Focused Business Models**

As technology changes and improves, companies must keep up with the rapid changes. Technological changes create opportunities for industries, such as flexibility and product individualization, but they also create “diverse challenges such as rapid technological change, increased complexity and changing customer preferences and legal requirements. This has led to challenging situations in a corporate context: manifold new technological opportunities are perceived, but people are uncertain how to use and implement them simultaneously in terms of product and service offers” (Rachinger, Rauter, Müller, Vorraber, & Schirgi, 2018). One of these opportunities is presenting its business offerings as both a product and “as-a-service”.

Companies are recently opting to do business “as-a-service” and customers today are responding well to this strategy. Business as-a-Service, which is a type of flexible consumption model (FCM), began as cloud-based computing, where updates are done on computer servers without users needing to buy a physical copy of software to download. This is referred to as
“Software as a Service” (Kerpen, 2017). This strategy has evolved to many other markets; meal preparation kits are being delivered to homes, clothes are being rented or purchased as a subscription and sent to homes, and many other companies are utilizing the business as-a-Service model.

The reason that business as-a-Service is attractive for customers is because these companies capitalize on convenience, which is exactly what the Millennial generation is seeking. They look for services that can provide them what they need without disrupting their lifestyles, which is why it is important to “meet millennials where they live” and provide services that “effortlessly fit into their lives regardless of industry or type of product” (Rajgopal, 2018). Service-focused companies are compelling not only to customers, but they also provide many incentives to the companies themselves. Flexible consumption models “enable predictable, renewable revenue streams, deliver greater value to the end customer by allowing them to pay for only what they consume, enable deeper insights into customer consumption patterns to help inform add-on sales, and lower operational costs by enabling a company to serve customers at scale through a common platform” (Arora, Khan, & Srinivasan, 2018). The financial outlook for companies operating with a service model is very high, and expected to reach $160 billion in the US in 2018 (Arora, Khan, & Srinivasan, 2018). While companies have traditionally focused on products, FCMs today must organize their activities around the needs of their customers rather than around the product itself and its life cycle. Instead of just moving the product sequentially down the value chain, companies need to have an interconnected value chain where they can “engage with customers at any stage at any time, which requires an operating model that can support multiple concurrent customer interactions” (Arora, Khan, & Srinivasan, 2018). The
company should take every opportunity during the creation and implementation of the product to interact with customers.

Ways to implement this type of business model into legacy companies includes moving services to the cloud, which “allows customers to pay monthly for services” and “consider[s] the needs of the new, mobile, constantly connected generation” (Kerpen, 2017). Other implementation strategies include finding opportunities for constant engagement such as on social media sites, using customer engagement to update and improve the product including constant customer feedback, and examining the inefficiencies of the industry in which the company is operating. Companies may need to adopt entirely new business models (Kerpen, 2017).

A change to the business model may be essential to reach customers in today’s technological environment. The majority of a company is affected when implementing a service-focused business model; more than 65 percent of a normal company’s operational capabilities are affected when making this shift (Arora, Khan, & Srinivasan, 2018). Business Model Innovation (BMI) is considered a “change in a company’s business model that is new to the firm and results in observable changes in its practices toward customers and partners” (Rachinger, Rauter, Müller, Vorraber, & Schirgi, 2018). Today, four things are driving new and improved business models: Big Data, automation, interconnections along the value chain, and digital customer interfaces, such as phone apps. Additionally, a company’s business model can be changed three different ways. The first is simply through optimization of the current business model, such as cost optimization. Next is a transformation of the current business model by reconfiguring it as an extension of the established business. Last is the development of a
completely new business model by perhaps attempting to squeeze out competitors or innovate new products and services. As much as changing the business model is an internal process, the company must also be aware of external factors to make successful changes. The company must take care to “analyze various alternatives, have a good understanding of customer requirements, a precise understanding of the value chain so as to deliver what customers need as cost effectively as possible” (Rachinger, Rauter, Müller, Vorraber, & Schirgi, 2018). Additionally, the core of a business model is to create “a sustainable competitive advantage in defined markets” (Peric, Durkin, & Vitezic, 2017). The sustainability of a firm in an ever-changing market should be considered a business strategy in and of itself, not just an “add-on” to the company’s strategy.

**Subscription Services**

Over the past decade, subscription services have boomed. Netflix started this movement over 20 years ago, and many companies followed suit. Since 2011, the subscription market has grown at an annual rate of 200% (McCarthy & Fader, 2017). This model has proven to be successful in many industries. Computer software companies, such as Adobe, Autodesk, and Microsoft, have changed from a one-time purchase to a cloud-based software subscription with a monthly or yearly fee. In the past six years, Adobe’s stock has increased 770%, Autodesk’s stock has risen 360%, and Microsoft’s stock is up 320% (Seitz, 2018).

Another industry that is adapting towards subscriptions is the healthcare industry. Although it is in its early stages, this model is expected to be successful. Patients pay by the month, quarter, or year for various services and perks. It could include same-day or next-day appointments and immediate consultations with the doctor through phone, email, etc. Healthcare
subscriptions are more receptive to patients’ needs and results in calculable earnings for physicians and doctors (Seitz, 2018).

The automobile industry is beginning to implement subscriptions into their businesses. Volvo offers a subscription, Care by Volvo. Subscribers pay $650 or $850 a month. In return, they obtain a Volvo XC40 crossover, along with insurance, maintenance, roadside assistance, and seasonal tire changes (Bigelow, 2019). Cadillac offers a similar service, known as Book by Cadillac. It is more expensive than Volvo’s though, at $1,800 per month (Bigelow, 2019).

Consumers prefer subscription services because they are convenient and affordable. Subscriptions offer flat rates and bundling opportunities, allowing consumers to save money. The largest demographics for people who sign up for subscriptions are 25 to 44 year olds who earn a salary of $50,000 to $100,000, and live in cities in the Northeastern U.S. (Columbus, 2018). Typically, women are more likely to subscribe than men. However, men usually are paying for at least three subscriptions at a time (Columbus, 2018).

On average, the revenue of subscription services grow 18.1% yearly, compared to retail companies who grow 4.1% annually and S&P 500 companies who grow 3.3% annually. This shows that since 2012, “subscription businesses have grown revenue about five times faster than S&P 500 company revenue and retail sales” (Seitz, 2017). Subscription services allow businesses to lock in returning customers. In the United States, “41% of revenue in retail businesses come from repeat customers” (Jorner, 2017). Businesses benefit from subscriptions because they receive predictable revenue stream. Lifetime sales for each customer also increase since subscription services encourage customer loyalty (Seitz, 2018). When forecasting the value of a subscription service, it is important to use a bottom-up approach instead of a top-down
The three main components to use in this calculation are flow of new subscribers, retention trends, and average sales per customer (McCarthy & Fader, 2017). Additionally, companies do not have to dedicate as much resources to marketing and selling efforts due to the length of the subscriptions (Jorner, 2017).

**Vehicle Membership Organizations**

AAA/CAA is a federation of affiliated motor clubs in the U.S. and Canada. Currently, it has more than 58 million members. AAA offers various services and products designed to serve its members throughout the life of car ownership. Its roadside assistance program is the largest in North America. This service provides members with flat tire assistance, minor mechanical adjustment, testing, boosting, or replacement of vehicle battery, towing, extrication, and lockout/locksmith assistance. AAA covers members instead of specific vehicles, so they can provide assistance to members whether they are riding or driving. AAA membership dues are paid annually (AAA Public Relations, 2016). New primary member pays between $48 to $96 per year. This cost varies per location. An associate member pays between $21 to $51 (AAA, nd).

Vehicle membership organizations typically offer other benefits besides strictly services. AAA has many programs that focus on driver and passenger safety. Their Seated, Safe and Secure initiative focuses on the safety of child passengers. Through this campaign, they sought to improve child restraint laws. Another program supported by AAA is the School Safety Patrol Program, which focuses on school aged children and teaches them the value of protecting classmates crossing the street to get to and from school. A major focus for AAA is teen driver safety. Through various outreach programs such as StartSmart and Dare to Prepare, AAA works
to educate both teen drivers and parents about the dangers of teen driving. AAA also works to protect Senior Driver Safety, which is for drivers age 65 and older. Through their AAA Roadwise: Review: A Tool to Help Seniors Driver Safely Longer program, they work to identify potential problems a specific senior could have with driving and they work to improve the drivers abilities. AAA works very closely with many government agencies to protect its members and to ensure their interests are represented (AAA, nd).

AAA currently offers five levels of membership. The “Basic” level includes towing for up to 3 miles, emergency fuel delivery, free jump and tire changes, extrication, and winching. The “Plus” level includes the same features as the “Basic” membership, plus free towing for a distance of up to 100 miles, delivery of sufficient free fuel to reach nearest gas station, expanded extrication services, up to $100 coverage for locksmith service parts and labor, and other various services. The “Plus RV” includes the “Plus” membership services for motorcycles, motor homes, fifth wheel campers, pickups with campers, boats, and travel trailers. The “Premier” level includes the same features as the “Plus” membership plus free towing for a distance of up to 200 miles of free towing, trip interruption protection, one day free car rental, and home lockout service. The “Premier RV” plan includes the “Premier” services for motorcycles, motor homes, fifth wheel campers, pickups with campers, boats, and travel trailers (AAA Public Relations, 2016).

Allstate offers a motor club that includes exclusive roadside perks. The motor club offers two levels of plans with different costs and features. The basic plan includes a $150 Roadside Benefit per incident, which includes tire change, billed fuel delivery and lockout service, $100 Road Hazard Tire/Wheel, which offers protection from nails, potholes and various road hazards,
$1500 Trip Interruption Benefit, which is a reimbursement of covered expenses incurred within 72 hours of mechanical breakdown or collision, and various other discounts on travel, CARFAX, and retail. This plan has a first-year membership fee is $79. The next level plan is the Platinum Elite. Within this plan, the Roadside Benefit per incident increases to $250, the Road Hazard Tire/Wheel increases to $250, Motorcycles and RV’s are included, and the various other discounts increase. This level of membership first-year fee is $139. (Membership, n.d.)

Summary of Findings

Based on our many sources, we found extensive information on the industry within which Goodyear Tire & Rubber Company operates, including the auto service maintenance and repair industry. We found that Goodyear has a relatively large market share and that industry trends are now leaning towards budget-conscious and environmentally-friendly cars and services. We also found the common pricing of maintenance services, as well as the industry standards of ride and car sharing. We also did research on our potential target market, the millennial generation. Mainly, we found that this is the largest generation in America, and their top priorities are spending less money and simplifying their lives. We performed a comprehensive analysis on Goodyear as a company, including a competitive analysis and SWOT analysis to discover where the company performs well and what they could do to improve. The company has a strong brand image and is very innovative, yet there is a lot of competition in the market. Last, research was completed on service-focused business models and current vehicle membership organizations. We found that companies are now capitalizing on the convenience that customers seek in their daily lives, and that companies operating with a service model have a positive financial outlook. We plan to use this research to aid in the development of our project plan.
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