

Competitive Analysis Tesla Inc.

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When seeking to determine how competitive a company is among others in a certain industry it is vital to the company of which the analysis is being performed upon to understand a number of aspects about itself first. It is also crucial in the development of the firm to have management personnel in place that also understand the direction in which the firm is ultimately moving towards. Management must seek out any information that could pose potential threats or complications in the progression of the firm. As well as aligning the key executive styles with the direction in which the company is ultimately migrating towards. Without this alignment, the full potential or “maturity,” of the organization will never be reached as well as the degree in which the organization is innovated at may never be fully recognized. In most circumstances today the odds are already against most firms due to the fact that another competitor is already producing or selling a similar product or service. The key thing to take from such hostile circumstances are ways to create a competitive edge from you and the other competitors that inhabit the market space. To put it in perspective, simply knowing what other firms in your market are selling is not enough information to strategically plan against the moves and decisions other firms make. From there your firm can begin to form a strategic outline of what decisions and moves your firm should make. Another core competency to be aware of and probably one of the tougher aspects of making these comparisons among organizations is predicting the direction in which other firms are going to try to position themselves in. At this stage of your analysis you should already be aware of who exactly your competitors are that inhabit the market space. You should also have a keen understanding of your organization inside and out. From this point it is crucial to analyze the content that each competitor is portraying to the public, especially in the modern era of technology. Your competitors could be taking the approach to downplay your organization and the other competitors in the industry, or taking a more organic approach in their

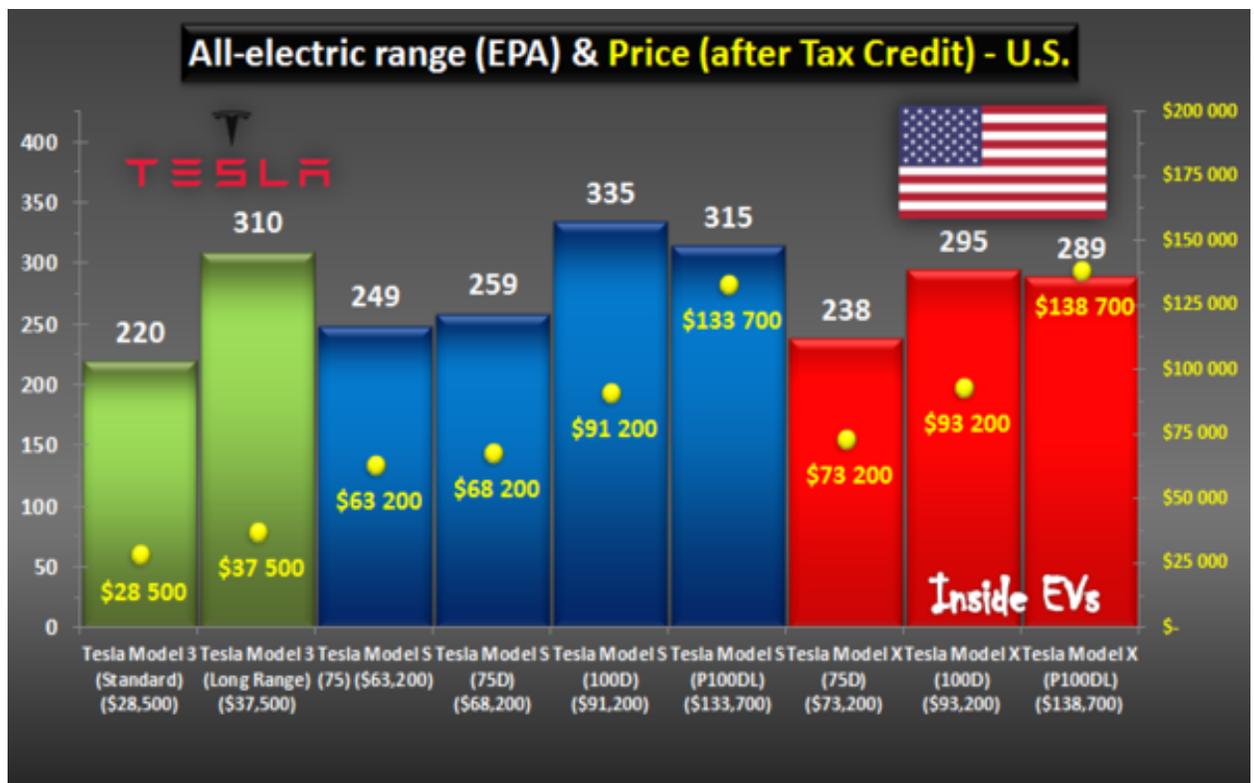
marketing scheme by trying to appeal to the customer base in a more direct manner. In order to grasp the approach your competitors are using to appeal to customers is very simple. You can look at their marketing approach by seeing what they are posting on social media, as well as using other media platforms such as TV commercials etc. From there you can compare and contrast your competitors approach in appealing to the customer base to your companies. For example, Tesla like other competitors in the EV market use media platforms such as TV commercial and social media to get their content to their customer base. Especially in today's era, social media has a huge impact on how companies strategize their marketing appeal to customers. The reason for a heavy rely on social media as a marketing tool is because of its cost effectiveness as well as the number of people that utilize social media everyday.

After you Identify your customer base and analyze their marketing perspectives you can then begin to categorize your customers into levels based upon the threat that they pose. The simplest way to categorize your competitors is dividing them into three main groups of competitors which are primary, secondary and tertiary competitors. Your primary competitors are going to be the companies that are selling a similar product to yours as well as targeting the same customer base. Your secondary competitors are going to be the ones that offer a higher-end version of your product, or vise-versa a lower-end version of your product. At this level of competitiveness they are targeting a different range of consumer based upon that customers propensity to consume a particular product at a given price. For example, Rolex offer's watches to a higher-end consumer and G-shock offers a more affordable watch; both have similar functions in telling time however they are on two very opposite ends of the pricing scale. Finally you are going to have tertiary competitors who are tangentially related to your company. These competitors are important in determining the future of the company. If your company has

intentions of expanding the product line offered it is crucial to look to these competitors because these are essentially the competitors that render whether expansion is possible as well as if the expansion will be profitable in the long-run. For example, if your company sells jewelry your tertiary competitor might sell gems and stones. It is vital to the company performing the competitive analysis to continuously monitor the actions of these competitors due to the fact that customer retention is the most important aspect in our opinion of any business. If you fall behind on a certain trend that a competitor of your's is moving towards that could potentially steal parts of your customer base then in essence you are losing potential revenues. The opportunity costs of not staying informed, or even worse becoming ill-informed about trends in the market can lead to the downfall of a firm's competitive edge.

As mentioned previously it is crucial when analyzing competitiveness within a certain market for your company to be aware of the competitor's that inhabit such market space. Contrary to that ideal, it is also essential for your company to understand every aspect of your own company and how it aligns with the mission and vision statements of the organization in progressing forward. This can be broken down into determining four key factors about your organization which include strengths, weaknesses, opportunities for the firm as well as potential threat your firm might face. For Tesla Incorporated there are a number of strengths that have played a key role in their positioning within the electric car market. As most people know Tesla is the leader in the electric vehicle market mainly because they were the first to launch a fully electric sport vehicle in 2008. Their initial model the Tesla Roadster became the first fully automated electric vehicle to enter the market, which has lead to their current position in the electric car market. Being the first company to launch this innovated technology posed as a strength for Tesla because it made them well known despite launching the Tesla Roadster in the

midst of one of the greatest economic crisis of the century to date. Another strength for Tesla is how they have positioned themselves in the new electric vehicle market in terms of luxurious style vehicles as well as long-range capacity of their models. They currently offer models of electric vehicles that appeal to a wide consumer base in terms of price, luxury as well as longevity of the vehicle itself. Some of their more luxurious models, although accompanied with a hefty price-tag include the Model S being priced in the \$70,000- \$80,000 range to their most expensive model, the Tesla X which is priced in the \$130,000+ range.



Continuing further with specific strengths that Tesla has exploited in the most recent years of production is how they have created versions of an electric vehicle that appeal to the middle-class consumer. As can be seen in the figure above Tesla has launched the model 3 that has both standard and long-range capabilities at a price that can be compared to a modern and affordable

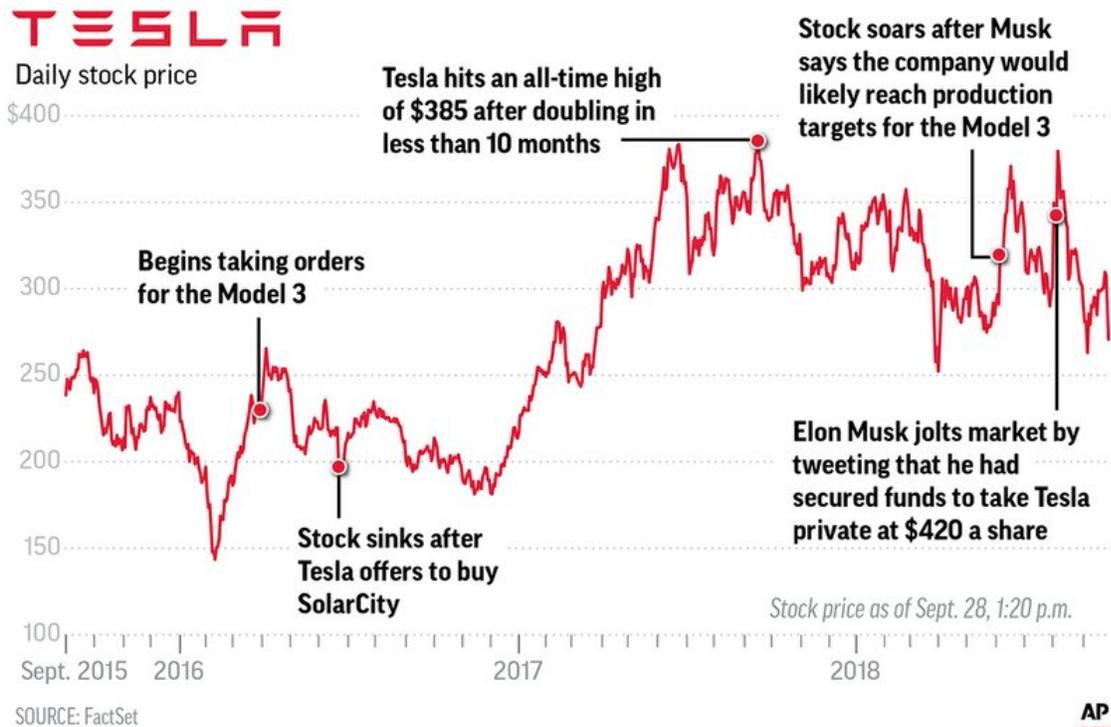
vehicle that is on the road today. Switching gears from the pricing aspects and diving further into the innovative side of Tesla Inc. we can see that they have positioned themselves in a blue ocean market with exponential growth in terms direct consumer selling. A key strength for Tesla is that they have cut-out the middle man in the selling process of their electric vehicles. If a consumer wishes to purchase a Tesla model electric vehicle the consumer has the capability to purchase directly from a Tesla brand store. By leaving out the middleman of the selling process Tesla has been able to utilize their unique business model to save on costs that unlike vehicles that use the source of gas which require scheduled maintenance and tune-ups.

While it is important to focus on strengths of an organization, it is almost equally important to focus on the weaknesses a firm may possess. Without a firm understanding of the weaknesses a firm may possess the opportunity for growth is put at risk. The initial weakness for Tesla Inc. undoubtedly had to be the pricing issue of their models. For the Model S and X Tesla saw a gross margin of 25% at a production level of 5,000 units per week which reiterates their position as the leader in EV production. However, Tesla being a manufacture of luxuriously innovative electric vehicles was faced with the issue of offering a model that appealed to the middle-class consumer. Being that as it is, Tesla also manufactures all models “in-house,” which can lead to high production per unit costs. Initial profit margins for the newly released model 3 were being questioned due to its high production costs of \$28,000 accompanied by a selling price of \$35,000. In the first quarter of production of the model 3 Tesla realized a negative profit due to the fixed costs associated while also accounting for depreciation. It was not until quarter 3 that Tesla balanced the costs associated with production to a similar level of output of that of the model S and X which evenly distributed those costs at a 5,000 unit per week production quota. Pricing strategies is a tricky thing to balance when producing and manufacturing all units in-

house, but Tesla has seemed to overcome this weakness through trial and error at different levels of production. Another weakness that has proven troublesome for Tesla is trial and error phases of production. In theory, producing all models from start to finish should be an advantage for any company if done correctly. However, as history has shown it can also lower the quality associate with production which in turn raise overhead costs due to technological hinderings. There are certain aspects of the production phase that need improvement at Tesla Inc. They are faced with the decision to fully assemble their electric cars robotically or evenly distribute the production process between “man-made,” and robotics as deemed fit. It will be a hurdle that Tesla must overcome in the production process to limit the costs associated with production in order to see the highest possible profit margins for all models. Until the perfect recipe for production is established at Tesla motors the demand for the newly trending luxury electric vehicles will continued to overshadowed by the fast growing demand of these vehicles.

In the next part of the analysis of Tesla Motors we can begin to look towards opportunities that are present for this fast growing organization. There are a number of external factors surrounding the hype that Elon Musk has generated for this company that can yield extreme benefits. Tesla has created an innovative product that appeals to younger generations in terms of environmental longevity. The relentless pursuit to move towards a sustainable future in regard to energy efficiency is at the forefront of Elon Musk’s core beliefs which align with Tesla motors mission to do just that. The push for the production of electric vehicles could reduce the emissions that contribute to inevitable climate change. Regardless of political beliefs we can see that the movement towards electric vehicles has superseded all other political agendas in order to ensure a cleaner and safer environment for generations to come. Switching gears towards more monetary opportunities that Tesla is creating for themselves it is evident that the fluctuation of

Tesla stock prices has remained steady since there initial public offering in 2008 at a price of \$268.63 per share. Tesla is currently selling stock at a price of \$267.70 when the market closed yesterday, and has seen price spikes well into the \$380 range over the previous year. Needless to say from an investment standpoint they have created financial opportunities for many who were willing to take the chance on company trying to inhabit a fairly uncontested market space.



Another unrealized opportunity that lies in front of Tesla for potential growth is not only as a car manufacturer and distributor but as a “software-as-service,” company. The movement towards autonomously driven vehicles is the future of the automobile industry along with the continuous growth in popularity of technology. When the preconceived movement of autonomously driven vehicles becomes the norm, drivers will convert to passengers and spend time in the car doing other things that peak their interests rather than actually operating the vehicle itself. Autonomously driven vehicles will appeal to a consumer base in a similar fashion

that aligns with the “green-movement,” in which Tesla’s core competencies are based upon. Finally, and perhaps the most important strategic positioning opportunity that Tesla has aligned for the future of this company is the current constructing of a gigafactory in which they can produce batteries for electric cars. Upon completion of the gigafactory Tesla will be able to proportionally reduce costs and support economies of scale brought on by the pricing issues revolving the Model 3 pricing dilemma. The gigafactory could also prove to be reduce their bottom line overall in terms of costs and further their efforts to move toward a cleaner source of energy.

With any organization there are inevitable threats that pose obstacles for a firm in any market and specifically for Tesla operating in a blue ocean market space in which competition is coming from all avenues of the automobile market. Tesla is facing competition from not only firms trying to inhabit the market space but also established firms from both luxurious and environmentally friendly car manufactures such as Ford and Nissan. Ford and Nissan offer their own versions of electric vehicles at an already reduced price than the cheapest model of Tesla. The competition of pricing becomes even more of an issue as more firms try to enter the market as they inevitably will. The next issue at hand is the problem of funding future projects through debt financing or equitable offerings. As previously stated Tesla’s stock market value has held steady in recent years but as more competitors enter the market the question of saturation of the market arises, as well as the return on investment to stockholders. Tesla is faced with the issue of continuing to innovate at a steady rate, while also competing for new investors to fund future projects. The final and most reputable threat that Tesla faces is the issue of continuously innovating their technological advances as Elon Musk “promises,” them to the public. Although they are a company built upon a foundation driven by such innovation they must maintain

credibility in the eyes of both investors and consumers in order to maintain a legitimate position in the electric car market. Along with organizational credibility, the threat poses to align their vision for the future with such continuous innovation over their competitors.

The electric car market is a vast growing market with the potential to revolutionize the automobile industry with Tesla being the leader if they continue to keep a competitive advantage. In order to do so, Tesla must remain firm in the core beliefs in which the company was founded upon while reacting to the market accordingly. Through the exploitation of their strengths and opportunities they currently possess while simultaneously positioning themselves against their current weaknesses and threats, Tesla's opportunity for expansion globally will be recognized. This ideal can be seen from the addition of two business people to the board of directors who have experience in growing organizations. The addition of Larry Ellison who has fifty years of tech experience could prove to be vital in the development of Tesla Inc. Ellison has seen the progression of the technological advances and could shed light on future endeavors for the organization in order to align its position as a leader in the EV market. Another noteworthy addition to the the board is Kathleen Wilson-Thompson, who acted as the executive vice-president and chief human resources officer for Walgreens. Kathleen brings a certain level of maturity to the board through her experience in portraying how a large publicly traded organization should operate. The separation of CEO and chairman roles as well as the addition of two seasoned business veterans could prove to be a potential strength for Tesla Motors. These amendments to the organization's structure will hopefully prove to put the mind of Tesla's investors at ease knowing that Elon Musk will be kept in check, thus creating new investment opportunities to assist in the progression of the firm.

To fully understand a competitive analysis, you must compare companies that are competing against each other in the same industry. While there are no other companies that only produce fully electric vehicles. There are still competitors that create electric vehicles to try to keep up with Tesla in this blue ocean they have created for themselves. One large competitor is Ford who is a very well known, and established company within the automobile industry since 1903. Ford sells the “Focus Electric” which is currently the only fully electric vehicle that they offer. Ford’s current lineup of cars does include some hybrids also, but only one fully electric vehicle. The Focus Electric was first unveiled in 2009 and was Ford’s best attempt yet a fully electric vehicle that was functionally sound compared to their previous attempts. They attempted a fully electric Ranger truck but in the end, should have never been released after all the recalls they encountered.

After getting some background on Ford, and their competitive position against Tesla we can take a deeper look with a SWOT analysis. Ford’s strengths, weaknesses, opportunities, and threats. Ford has many strengths internally including brand recognition, Research and development, diversified product lines, adaptability, and a large global network. These five strengths can all intertwine to create a powerful business strategy. Starting with brand recognition it is estimated that Ford’s brand value is give or take \$12.74 billion. Branding allows companies to create a name for themselves so that they can convince the people to trust, and commit to the company. Once a company has built a recognizable brand the consumers can easily recognize that brand for future purchases. If the consumers have gained trust in a company such as Ford they know that the next vehicle they buy will be up to the same quality standard as the last. A huge advantage of having a big brand is the ability to market your products without having to sell the customer on each new product your brand releases. When Ford released their

new all-electric vehicle called the Focus Electric their customer base knows it will be a reliable vehicle because they are such an established competitor within their industry.

Another strength Ford has is their research and development of new products and modifications to current products. Research and development focus on many different aspects of product innovation. Ford has created innovative technology to keep up, and continually gain an advantage over other vehicles. Ford implemented many new technologies into their upper-level trucks such as front & rear cameras for parking along with a trailer assist knob. In 2018 alone Ford spent 8.2 billion dollars on research and development . In 2018 the companies operating expenses were \$157.135 billion which means that about 5% of the company's total operating expenses were spent on R&D. When a company has high levels of R&D it allows them to create a diversified production line throughout their company life. Ford has continued to compete by diversifying their products, and not only stick to their best sellers such as the Ford F.150. Ford's most diverse vehicle yet is their new electric vehicle which they have finally mastered and released.

Another strong suit that Ford has under their belt is that by being such a large, and well-backed company they can dabble in different areas without finding themselves in financial troubles. The company can adapt to market changes, economic changes, and many different aspects that can vary within the industry. Ford motors is one of the few automotive companies that did not face bankruptcy when companies such as General Motors and Chrysler did. Adaptability comes in many forms not only in the financial aspect but the company can adapt to new technologies, and new vehicle types. Ford has a wide range of products that can be used for many different things, and adapt to the different areas they are sold in. Trucks are a large percentage of their sales in Texas compared to the number of Ford Focuses in Texas. On average

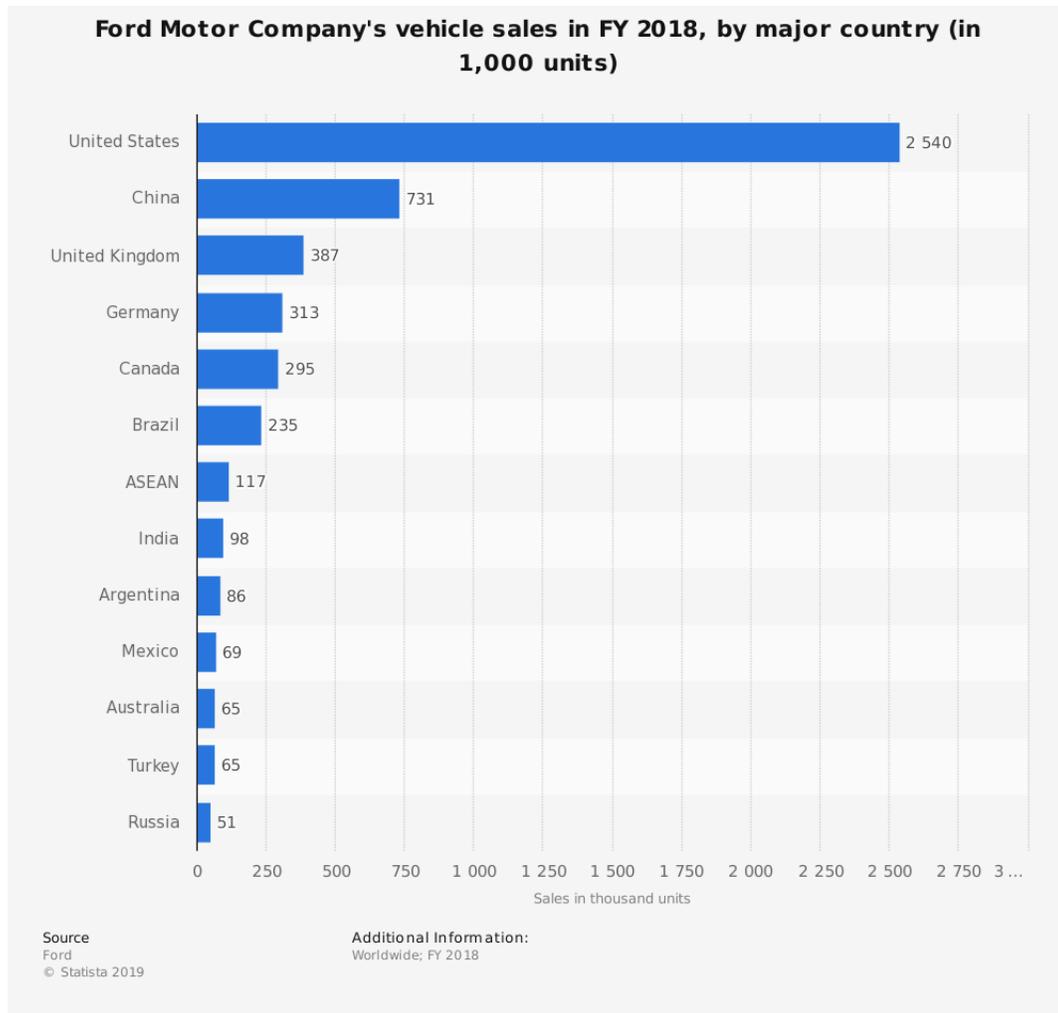
one out of five trucks sold in the United States are sold in Texas because of the popularity, and functionality in the state. Ford has adapted to the Texas market space by supplying a greater amount of F series trucks to this market to fulfill the demand. Adapting to submarkets within a country is a great strength to have when you operate in many countries as Ford does. They currently have a presence in 62 countries so they must adapt to new market places, and adjust their marketing efforts to fit the demand of that country.

Continuing our analysis of Ford, we will move onto their weaknesses, and what they are currently struggling with as a company. All companies have strengths, and they also have weaknesses which Ford has struggled with throughout the last few years such as Recalls on vehicles. Recalls occur when companies find issues or flaws with the products they have released to the world to buy. When the company finds out they have an issue they have recalls trying to get all consumers with that product to get it into the shop to correct the issue. Recalls are a very costly occurrence because they commonly happen in large numbers of products. In 2016 Ford had to recall about 830,000 Ford and Lincoln products that they had produced due to an issue with side door latches . “That includes a \$295 million charge for two recalls, one involving engines that could catch fire and the other involving door latches” (Martinez, 2017) this huge loss was incurred at the end of 2016 into the beginning of 2017. This large amount of money was no little issue, but the company continued to operate with no issues once dealing with recalls.

Another weakness that Ford has is that they have a poor reputation compared to other companies. Bad reputations come from many different variables, and one of the reasons they are looked at as inferior to others is recalls. Recalls show that the company has flaws, but when there are constantly recurring recalls people begin to worry. Would you rather buy a vehicle from a company that has recalls every few years, or a company that has multiple recalls per year on

different products they are producing? Most consumers would rather buy a product that has fewer issues than a product you have to fix after buying. Ford's reputation in the United States is seen as a lesser company than Mercedes or Audi. Mercedes is a high-end automotive producer that an average American strives to own rather than driving a very common or bland Ford Taurus.

As we look into different markets, and consumer preferences of vehicles it is obvious that Ford relies very heavily on the US market for their success. Ford being an American company has a very strong base in their home country, but has not fully exploited the foreign markets that are available. In the 2018 fiscal year, Ford sold 2,540,000 vehicles in the United States which is their largest market with China being the second largest at 731,000 vehicles according to [statista.com](https://www.statista.com). Ford does sell vehicles in many different countries, but they are limiting the company's dominance in new and rising markets. Emerging automotive markets such as India, are areas that Ford has not yet established their brand. In the following graph, you can see that Ford lacks large numbers of vehicle sales in India which is currently only at 98,000 vehicles.



In many cases, your weaknesses can be looked at as opportunities for improvement which is true for Ford in this scenario. Ford has many opportunities to expand upon so that they can continue to grow as a company, and expand its customer base globally. As I previously mentioned the large global markets Ford needs to invest deeper into are India and China. Other opportunities that face Ford are the ability to get ahead in innovative technologies such as environmentally friendly vehicles, and self-driving automobiles. The opportunity to create an environmentally friendly vehicle is not new to Ford but has yet to be perfected. Just because a company is not the first to come up with an idea, or attempt it does not mean they won't be the one to create value in it.

Starting with the opportunity to grow within current global markets we will focus on how Ford can make a larger impact in India and China. Focusing on India it is said that “During April 2018-January 2019, automobile production increased 9.84 percent year-on-year to reach 26.26 million vehicle units” (India Brand Equity Foundation, 2017) which is a huge increase in production in only 9 months. Ford needs to quickly establish a solid reputation for their company in this country to flood the market with their products as the economy continues to grow. If you are behind the demand curve of the current economy another manufacturer will supply the demand that is created leaving your company behind.

China’s automotive market is very concentrated but is still an opportunity for Ford to gain greater market share overseas. With a population of 1.3 billion people the consumer base there is much larger than that of the US. Ford should focus on the sale of eco-friendly vehicles in China to help with the pollution issue that the major cities are facing. Now that Ford offers a newer fully electric vehicle they can try to get a greater grasp on China’s markets. The Focus Electric would allow for consumers to commute without increasing the pollution in the air. This opportunity will allow both the company and the major cities of China to benefit with increased sales of this new product.

Environmentally friendly vehicles have gained popularity as the production, and functionality of the vehicles have improved. Companies including Ford were competing to create the most environmentally friendly hybrid car on the market for many years. The battle of the hybrid was quickly shifted by the invention of the fully electric vehicle which was produced by Tesla. Ford quickly responded to the shift in demand for the new electric vehicles, and produced their Focus Electric. The EV market created many new

opportunities for automobile manufacturers. All companies now were competing to create the most value innovative electric vehicle on the market. The only issue for the companies is that Tesla had a head start, and has continued to create value innovation in their products. Ford is currently trying to gain an advantage by creating self-driving cars with Artificial intelligence. They had invested 1 billion dollars in 2017 into a company to help them perfect this idea according to Medium.com. They have hopes for these cars to deliver groceries from Walmart to your door.

In a large industry such as automobiles, you are bound to face competition which Ford deals with on the daily. Therefore, we cannot ignore the fact that Ford does have threats such as high levels of competition, increased cost of materials, and regulations within the countries they operate. Ford has been producing cars for a century facing many different threats such as new entrants, government regulation, economic changes, and many more. With that being said it is clear that Ford is still standing to this day, and still one of the top automotive producers in the world.

Competition is a threat that can be viewed as a positive, or negative factor on a company. A certain level of competition challenges a company to continue to prove their worth within an industry. If there were no competitors within Ford's truck market you would see a steady production of the same product with no innovative features. F series trucks have been challenged by many companies such as Chevy, Dodge, and Toyota. Toyota has always created cars, but in May 1999 they released "The Tundra the first North American full-size pickup truck to be assembled and distributed by a Japanese manufacturer" (carcovers.com). Toyota has competed against Ford in all vehicle

submarkets including cars, trucks, crossovers, and continuing the competition into electric vehicles.

Tesla is Ford's main competitor in the electrical vehicle market because they were the first to produce an EV. The threat of being beaten to innovative product has already passed, but now Ford must try to create the most valuable electric vehicle. The threat of no longer being the innovative leader within the automobile industry is starting to slowly become more real to the company. Innovative value is what makes companies stand out within their industry, and Ford is falling behind the electric curve. In fact, they have even decreased the price of their product to try to increase sales within the market. If Ford doesn't get a stronger hold on the EV market they will be bypassed by many competitors.

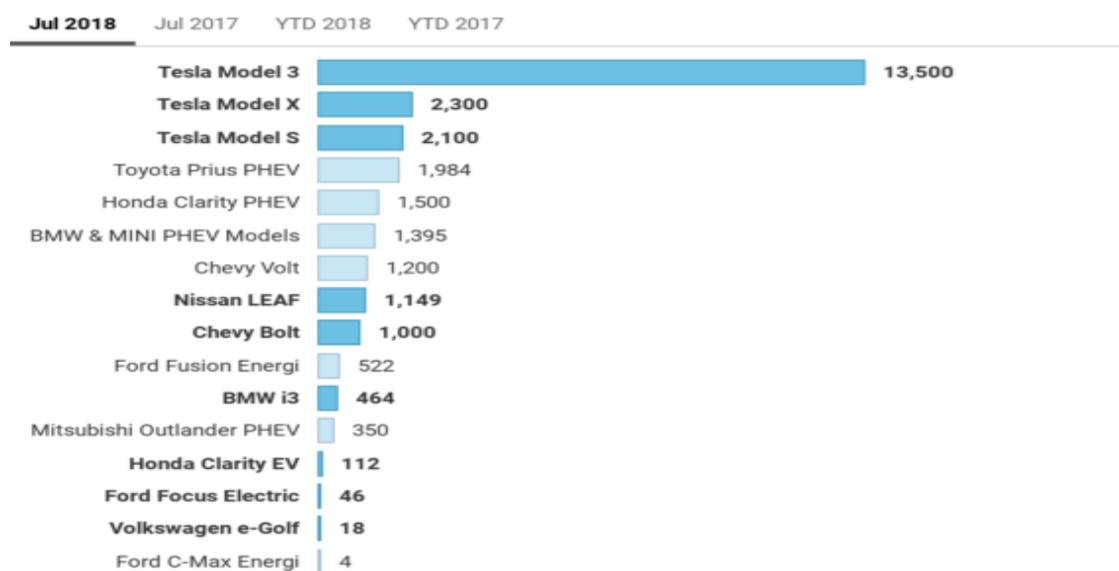
Another threat that correlates with electric vehicles is the emission standards of vehicles within the US and certain states. Current emission standards are constantly changing, and have started to move in the direction to favor electric vehicles. Companies producing gas, and diesel engine vehicles must continue to stay within the emission standards to prevent future fines. Increased costs of materials are also posing as a threat to Ford. "Currently, automakers get a \$2,500 to \$7,500 subsidy in the form of a tax credit for consumers for their first 200,000 electric vehicle sales" according to Vox.com (Irfan, 2018). There was also a request for an extension of the number of sales to continue to motivate companies toward electric vehicle production.

In conclusion, there are many different aspects that go into Ford's SWOT analysis that make them the large, and successful company they are today. Through the strengths, weaknesses, opportunities, and threats we can find the most valuable features to this

company. Ford's strengths are very important to the future of the company. They must sustain their current strengths to continue to be the dominant company they are in the automotive industry. The branding of Ford has helped create the company and allowed them to invest such large amounts into R&D to continue to adapt to the ever-changing marketplace. Research and development help create innovative ideas within a company, and expand on them when necessary.

The weaknesses within Ford do cause issues but are not severely vulnerable in their current position. For the company to continue to compete amongst innovative companies they have to reduce the number of recalls on their products. The number of recalls does directly correlate with the poor reputation that Ford has been given from other countries. If Ford hopes to be a leader in the electric vehicle market they must change their reputation. Consumers are eager to use electric vehicles but will be reluctant to try Ford's EVs if they have recalls. Being an American company I do not see the issue with Ford heavily relying on the US market. If Ford establishes a reliable, and affordable EV in the US there will be demand for it. Ford's main focus should be to create the most value innovative electric vehicle on the market so that the demand for it will increase their presence in other countries markets.

US Electric Car Sales (July 2018 vs July 2017)



*Darker bars/names = fully electric. Tesla sales & Chevy sales = educated estimates (not perfect).
Source: [CleanTechnica & EV Obsession](#) · [Get the data](#) · [Created with Datawrapper](#)*

A SWOT analysis of a company is a great way to create a starting point of how a company is doing. To better understand a company, you can compare them to a competitor to see how they differ, and how each company operates in its own ways. In this scenario, we will compare Tesla, and Ford while mainly focusing on each companies SWOT analysis. Ford and Tesla are very different, but also very much alike in many ways. Ford is the oldest automobile manufacturer there is, and Tesla is the newest. Both companies started out as innovators, completely free of competition within their markets, and eager to expand.

Ford created the first automobile ever and similarly, Tesla created the first ever fully electric vehicle. If we were to look at Ford's strengths we would mention the well-established Ford brand, the Research and Development, diverse product line, and the adaptability of the company. Comparing strengths, you see a difference in the companies

because Tesla is not a common household name as Ford is. The common strength that both share is the heavy reliance on research and development to continuously innovate new products, and improve current products. Tesla is not as diverse as Ford and has not adapted to the market the way Ford has because Tesla jumped only into the EV market.

Focusing on the commonality between the two companies is that both spend a very large amount of time, and money on Research & Development. In 2018 alone Ford spent near 8 billion dollars on R&D while Tesla spent only around 1.5 billion on R&D according to statista.com. Ford clearly spent more than Tesla in 2018 on R&D, but Ford's operating expenses were also \$157.134 billion compared to Tesla's \$21.849 billion in 2018. Ford spent nearly 5% of their operating expenses on R&D while Tesla spent 7% of their operating expenses on R&D. Comparing these companies expenses without referencing the whole picture creates a skewed image. Research and development is the key factor to create innovative advancements within a company, and also finds ways for a company to expand its current business portfolio. One of Tesla's greatest strengths outside of electric vehicles is the company's focus on lithium-ion batteries and solar energy. Tesla is a company backed by a strong commitment to making cleaner energy for the world.

Tesla is not as diverse as Ford is within the automotive industry, but they have continued to diversify its company by expanding the product line of EVs and more. If you go to Tesla's website and find the "About Tesla" tab you will find the following statement "Today, Tesla builds not only all-electric vehicles but also infinitely scalable clean energy generation and storage products" (Tesla.com). A company creates its own

limits which have allowed Tesla to innovate freely, and explore all possibilities of clean energy. Tesla has continued to branch from their original idea of cars to far greater inventions. For Tesla as a whole this diversity allows the company to generate revenue in many different ways to separate them from other companies. Ford has a very diversified product mix ranging from gas, diesel, hybrid, and electric vehicles. Each category contains different vehicle types such as sedans, crossovers, SUVs, and pick-up trucks which allows consumers to find the best option for their needs.

Narrowing down our comparison of the two companies we are going to focus on the electric vehicles they produce, and how they line up against each other. Ford currently offers three hybrid vehicles one being the 2019 Fusion Energi which can function solely in electric mode, but also has a gas engine. To get the best apples to apples comparison we will look at the Ford 2018 Focus Electric (\$29,120) against the Tesla Model 3 standard plus (\$36,200). There are three different packages of the Tesla Model 3 but we will use the most basic in this situation. For starters, both vehicles have the capacity to fit five people and are fully electric running on a lithium-ion battery. The Ford does cost approximately \$7,000 less than the Tesla but the price isn't the only important factor. The biggest advantage of the Model 3 sedan over the Focus is that it has a range of 240 miles. The Focus electric only has a range of 115 miles which is less than half of what the Tesla's range is. Tesla's have over 12,000+ superchargers located across the US for charging opportunities.

The Tesla Model 3 may be more expensive than the Ford Focus Electric, but who wouldn't pay more for double the mile range, and an overall more luxurious vehicle.

Tesla also offers services to your vehicle at your home if any issue ever occurs. Both Tesla and Ford have many opportunities to take into consideration within their scope of work. The number one opportunity is continuous innovation of electric vehicles to increase the range, decrease charging time, and also decrease the cost of the vehicle. The current weaknesses for Tesla are that they do not offer any vehicle that can go a long distance, and be refueled quickly. Ford, on the other hand, has gas, diesel, and hybrid vehicles in their line up to offer until they perfect an EV.

Ford's weakness within the EV market is also their strength, they are a well-known company which will help them sell EVs but they are also known for recalls. Consumers may trust Ford when purchasing a truck, but when it comes to electric would they trust a company that is solely focused on EVs or a company that is just trying to keep up in the changing market? Would you rather a company you trust making gas cars, or a company you have no history with but has created luxury EVs that have been proven to last? Consumers are faced with these questions as they consider switching to an electric vehicle over a traditional gas engine. Both companies have a great opportunity to prove to consumers that EVs are the future and that their product is superior to competitors.

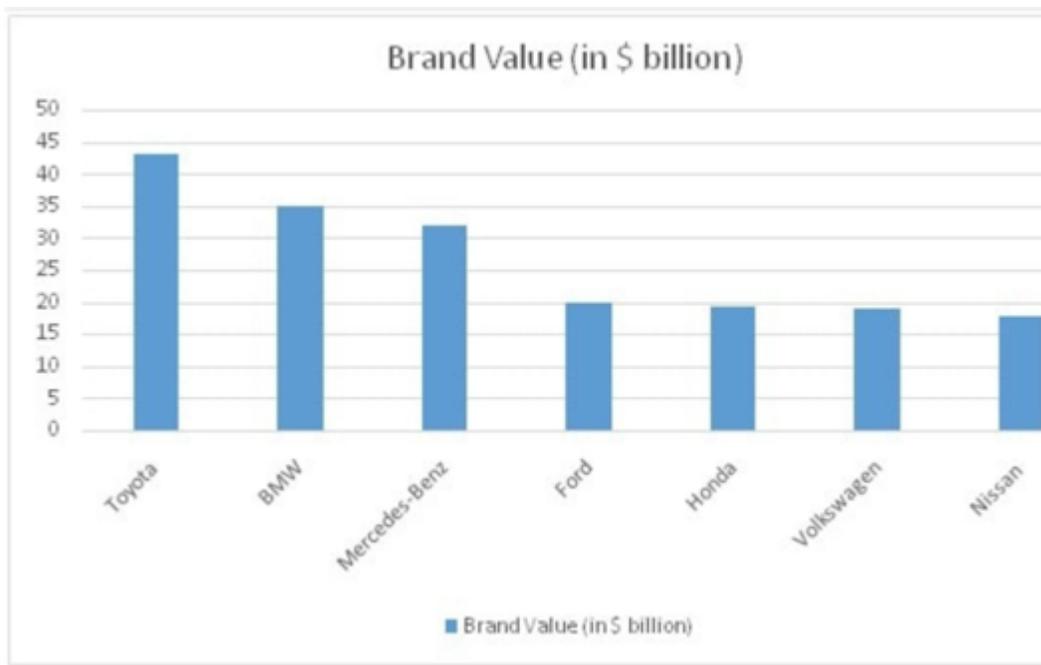
Threats both of these companies' face are other major players within the automotive industry that are trying to establish a name for themselves within the EV market. Toyota, Nissan, BMW, and others are constantly creating new ideas for EVs. Increasing material costs lead to higher production costs which cause higher prices for all vehicles whether they are electric or not. Fords Focus Electric struggled in 2018 with

only 560 total sold, while Tesla sold 139,782 Model 3s in 2018 (InsideEvs.com). It is clear that Ford is facing major issues with finding consumers who are willing to buy their fully electric vehicle. Ford has invested 11 Billion dollars into its electric vehicle development to compete with others who have already implemented EVs.

Ford may not see drastic changes in sales within the next ten years, but within the next twenty years there will be a shift to Electric vehicles. If the company is unable to produce a quality EV within the next few years they will lose customers to other companies that produce EVs. “The 2018 numbers are in, and total U.S. EV sales came in at 361,307 for the year — up 81 percent over 2017” according to Inside EVs. Although the number of EVs sold in 2018 is only around 2% of the total number of vehicle sold in the US it is a growing market. Only time will tell if Ford’s investment into EV production will pay off, and allow them to compete in this innovative market.

When looking at the competitive analysis for Tesla it is vital in the success of the firm to analyze other industry leaders. Among those leaders a key competitor for Tesla is the Nissan corporation which is headquartered in Yokohama, Japan. In order to fully grasp the competitive positioning Nissan poses towards Tesla a SWOT analysis must be performed. Nissan has been around for just shy of a century with a very strong global presence which include countries such as: Japan, Mexico, the US, Europe, China and more. Nissan operates in many diverse markets to a very large customer base. One of the key strengths for this company is that they are a very well known, and trusted brand in the world. According to marketing91.com, Nissan’s brand alone is worth \$17.785 billion dollars which allows for the company to market products easier. Nissan is ranked in the

top ten of the worlds automobile sector in terms of brand value. They sit in seventh place behind Volkswagen, Honda, Ford, Mercedes, BMW, and the leader Toyota as shown in the graph below.



Nissan is part of an alliance with Renault, Mitsubishi, and others which was created in 1999. This alliance is made up of the three companies listed previously along with seven other brands. The structure is set up so that Nissan and Renault are both apart of an alliance board with Mitsubishi on the outside. “The alliance has said it plans to raise combined sales in 2022 to 14 million vehicles from around 11 million in 2018, on four common engineering modules with common engines in 75% of the output” (Winton, 2019) this is another prime example of the good that comes from the alliance. This alliance has created great opportunities for Nissan in many ways, one being that they can pool their equity together, and also making this Nissan’s greatest strength. According to

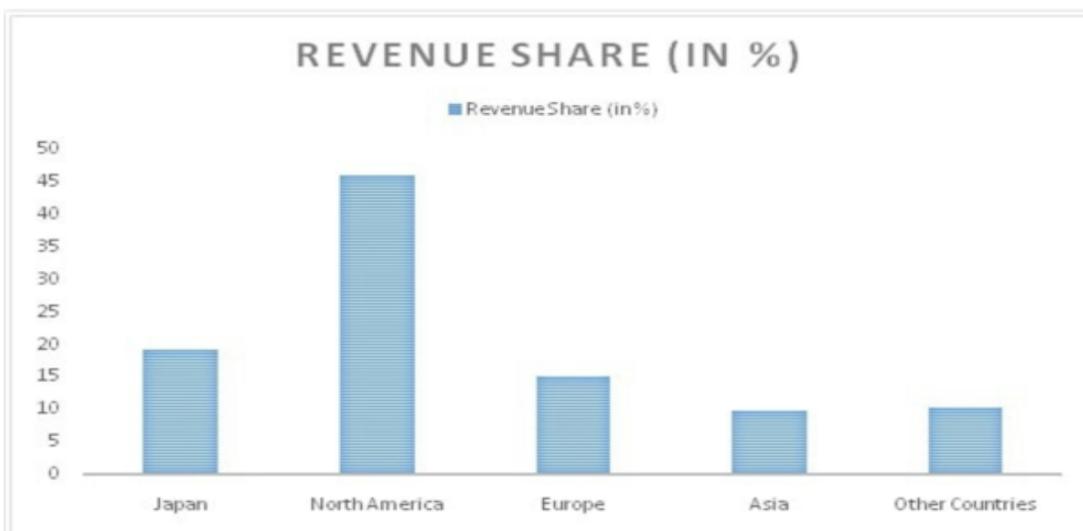
Statista.com the alliance spent nearly \$2.9 billion dollars on research and development for new innovative technologies in 2018. On the alliances website, alliance-2022.com, they state that their main focus is in electrification, connectivity, and autonomous drive. Nissan released that they are expecting a fully autonomous vehicle to be available in 2020. This self driving vehicle idea is not brand new to the automotive industry but has yet to be perfected to meet consumer needs, as well as future needs that might interest consumers as technology continues to advance..

Specifically looking into Nissan it is evident that they company held true to their goals by producing the Nissan Leaf. The Leaf was launched in 2010 in the United states as Nissan's first fully electric vehicle on the market. The only Leafs sold in 2010 were in the month of December at a shocking number of 19 according goodcarbadcar.net. In the following full year Nissan sold 9,674 in the US which is a more reasonable number of first year sales rather than 2010. Creating an electric vehicle at such an early stage of an emerging market creates a huge advantage over other manufacturers. Strong capital support from Nissan's alliance will allow the company to experiment with new product ideas in different markets. However, as the ability to launch a new model of vehicle into the market is respectable regardless of how it is powered, it must penetrate the market at the right time at the right levels of output to produce positive margins.

While conducting further research about Nissan you will discover that the company does have a few weaknesses. The main weaknesses we are going to focus on are the high number of recalls with products, disadvantages of an alliance, and the lack of sales in particular markets. There are many correlations between a company's strengths and weaknesses commonly because we overlook the bad that can come from the good.

As previously mentioned it was established that one of Nissan's strengths was how large, and powerful their brand name is. Issues arise when a company has a very strong brand name because sometimes consumers remember you for the wrong reasons.

Branding your company allows for greater sales, and customer loyalty within a market with a slow turnover on such as vehicles. Nissan encountered major set back which is portrayed as a weakness on a large scale when nearly 350,000 vehicles were recalled. According to Kelley Blue Book 350,000 Altimas were recalled because of an issue with the rear door latch. This fault in the production of a Nissan vehicle may seem very miniscule but consistent recalls create a bad reputation for a brand. We saw this same weakness occur with Ford as we dug deeper into the company's history. Recalls can lead to decreases in sales which are very competitive in the automotive industry. In order to maintain customer retention in the automobile market (and any market for that matter) the consumer experience must be at the forefront the organization's attention to have repeat business. Simply selling a single vehicle and expecting a consumer's repeat business is naive, and can prove detrimental to the company.



Fierce competition within foreign marketplaces can cause companies excess spending on marketing as well as production if the product does not fit that geographical location. In the graph above you can see that Nissan struggles to generate revenue from Asia compared to North America. The lack of ability to generate sales within a continent could be for many reasons such as functionality, reputation, import taxes, and many more reasons. There is no easy answer to the question or else the Nissan alliance would have already implemented a new strategy to generate more sales.

Nissan is a very well known company but not many people know that it is part of an alliance which may not cause any issues with consumer's, but could cause internal issues. When companies merge, and form alliances they become one in the same. The incorporation of ideals across organizations can become jaded which may cause the merger to be overlooked in terms of the true meaning of the intent of the merger itself. Many good things come from alliances but companies working within the same line of work can come to disagreements. Renault, Nissan, and Daimler created an alliance board to work together to improve business operations. It is also important to note that Nissan is a non-voting party which takes their voice away in major decisions. Currently the alliance faces issues between France and Japan. According to Forbes, If France does not cooperate in giving up power in the Nissan-alliance it may be the end of the whole agreement.

Weaknesses can be analyzed by a company to see how they can better its current status within an industry, or market. Nissan has many realistic opportunities that they could further invest in the very near future. Assuming that the current alliance stays together we can also assume that they will progress along the same strategic path. The

Nissan-Alliance has four main goals according to their website which include: Engineering, Supply chain management, purchasing, and human resources. The alignment of the company's goals, and actions have been very well correlated. The key is to maintain sight of each of those goals in the progression of trying to penetrate new market spaces.

Nissan has engineered an all electric vehicle which creates the opportunity for them to diversify their current product line. Diversifying further into alternative fuel based vehicles creates a large competitive advantage over other companies. If Nissan can become the leader in EVs or another type of eco-friendly vehicle they will lead the industry. Innovative engineering, and supply chain management will allow Nissan to not only create new products, but also produce them at lower costs than before that lead to certain profit margins. A strong focus on supply chain management decreases the unnecessary costs when getting materials and products from point A to point B.

Human resources is a large portion of every company, and can have a large effect on the company's current operations. This opportunity can be directly correlated with supply chain management in the sense that both work together hand and hand to ensure the quality as well as the legality standards of the organization are upheld. The higher level human resources that work on supply chain management the higher level output you will receive from the overall operation. "For the last 18 years, Renault, Nissan and Mitsubishi are engaged in a unique alliance to generate synergies for all of the companies involved" says Carlos Ghosn CEO & Chairman of the alliance. The alliance focuses on each strong suit so that together the opportunity for higher production levels are achieved.

Threats are present in all competitive markets where there are constant changes in internal and external factors that drastically affect the market. The automobile industry as a whole is susceptible to the threat of producing a unique and safe vehicle that solidifies future endeavors in the market. Threats present for Nissan at this current time may be different than those of the future, but you must address all threats to prevent internal error. The economy is a threat for all businesses, and especially companies that operate all over the globe watching different regions local economies daily. Nissan-alliance faces some major threats such as high levels of competition, international conflicts, and increasing costs of raw materials.

Nissan faces high levels of competition in all the markets they currently operate in whether it being electric, gas, or diesel engine vehicles. In newer markets such as the electric vehicle market Nissan and Tesla are each other's biggest competition. Not many companies produce fully electric vehicles that have made enough revenue to continue to sell. Ford for example, is no longer making an EV in 2019 due to the lack of sales in 2018. Ford may serve as an example for other companies within the automobile industry and deter others from trying to attempt at entering the market. Ford is a large competitor within the gas vehicle market competing in many of the same countries as Nissan does. In the 2018 fiscal year, Nissan sold nearly 1.5 million vehicles in the US, while Ford sold close to 2.4 million according to Ford's yearly sales numbers found on their website.

Global companies face many threats, but global alliances face an even higher number of threats because of tension between countries. As previously mentioned in Nissan's weaknesses, it is evident that France and Japan are having trouble coming to terms on a disagreement. This disagreement could lead to a failure of the alliance which

would cause Nissan to lose a great amount of funding for future innovation. Without future funding of innovative ideas, Nissan will fall behind to Tesla in the electric vehicle market. Multinational businesses face very diverse markets with different currencies that are constantly fluctuating. The entering into such foreign markets brings about a number of questions to the firm considering the entrance, due to the fact that across cultures morally and ethically as well as the practical nature of business varies a great deal.

A threat that all manufacturing companies face is the threat of increased material costs for their products. Material costs vary from supplier to supplier which is why supply chain management is a rapidly growing concern. The focus that Nissan-alliance has stressed on supply chain management will help the company cut production costs as much as they can when material costs rise. The reason that all companies face this threat is because all manufacturing companies have to use raw materials which can be scarce at times. Seasonal weather such as rain, snow, and heat can cause many issues. Heavy rain and snow storms can cause destruction to raw materials, and cause delivery delays. Delays cost money because it slows down the supply chain, which creates a price surge for some companies.

When you compare Nissan and Tesla it can be difficult due to Nissan having an alliance backing them. Another issue when placing a magnitude upon this comparison is Nissan's production of other vehicles that require other sources of fuel. From a revenue standpoint when combining sales of vehicles in both gas and electric markets it is easy to assume that Nissan has the upper hand over Tesla. Although Nissan only has one fully electric vehicle which is the Leaf, the alliance is constantly working on more. It is hard to differentiate the research being conducted by Nissan from the research being done by the

whole alliance. Therefore from strictly an innovative point of view the comparison poses some equitable questions. Tesla was first to the market with a fully electric vehicle but Nissan was a close second. In a sense it is almost comparing apples to oranges in terms of the differentiation that occurs among the two competitors. The major and more evenly weighted comparison that can be made among these two competing companies is their electric models. Specifically the comparison of the Nissan Leaf and the standard Tesla Model 3 which are similar in price as well as the time-frame in which they entered the market. Both electric vehicles have a tax credit attached to them upon purchasing, which is a nice incentive for consumers to “go green.” They both are similar in price relative to the costs associated of production and the appeal in which consumers base their decision of purchase on. They even offer similar fuel economies as can be seen below in comparison chart. Where the two vehicles begin to differ is in the amenities attached to each unique EV. While the Nissan leaf offers Apple carplay as well Android auto which greatly simplify and improve the safety of traveling while using electronic devices, it lacks in horsepower in which it produces 158 HP. It is even equipped with emergency braking and auto-climate control features but that is the extent of the appeal to the consumer. Being that the Leaf is Nissan’s initial model, consumers will continue to watch as advancements are made in the production of future EV models from Nissan. Now to the competitor which is the standard Model 3 that Tesla has recently launched. The model 3 passes the eye test of the consumer, while producing a 271 horsepower and astonishingly accelerates from 0-60 in 5.6 seconds. The model 3 also comes with emergency braking as well as blind-spot monitoring.

	2019 Nissan Leaf S FWD	2018 Tesla Model 3 LONG RANGE RWD
Powertrain	1-Speed Dual Clutch	1-Speed Dual Clutch
Drivetrain	FWD	RWD
Fuel Economy, City	124 MPG	127 MPG
Fuel Economy, Highway	99 MPG	123 MPG
Interior		
Maximum Seating	5 seats	5 seats
Front Legroom	42.1 in	42.7 in
Back Legroom	33.5 in	35.2 in
Payload and Towing		
Cargo Volume	23.6 cu ft	15 cu ft
Maximum Payload	1,020 lbs	987 lbs
Exterior		
Length	176.4 in	184.8 in
Width	70.5 in	82.2 in
Height	61.4 in	56.8 in
Wheelbase	106.3 in	113.2 in

The advantage that both electric vehicles are accommodated with is the upgrade eligibility upon purchasing that the consumer can uniquely choose among alternatives to personalize the vehicle to meet specific needs and desires. The Model 3 seemingly offers more upgrades than the Nissan leaf but at additional costs that may drive consumers to consider when purchasing their eco-friendly vehicle. It will be interesting to watch as these models establish their positioning in the market and further peak consumer interest through continuous innovation.

As an automotive company that has been on this earth for 103 years and counting, BMW has climbed its way to one of the most prestigious brands in the world. Known for their beautifully well-crafted cars, motorcycles, and marine engines, Bayerische Motoren Werke has accumulated a production output of 2,691,423 vehicles and total assets of \$193.48 Billion in 2017. They are currently producing a variety of models and continue to innovate through design

and performance. Being positioned in the luxury and performance categories of the automotive industry, BMW is faced with many competitors who produce vehicles with similar qualities. Through assessing BMW's strengths, weaknesses, opportunities, and threats, one can come to an accurate conclusion of their strategic positioning within the industry.

Starting with their strengths, BMW has been producing vehicles longer than most automotive companies that exist today. As a result, their company has established great relationships with hundreds of auto part suppliers around the globe. Around 50% of these suppliers are located in Germany or are subsidiaries of German companies, the rest are located in Mexico, US, and Canada. These supplier relationships are crucial for any business and maintain a competitive edge amongst other auto companies in the industry.

Along with its strong supplier relationships, BMW has also maintained strong corporate social responsibility with its suppliers. They have established sustainability guidelines with their suppliers and aim to utilize only environmentally friendly production methods for their materials. An example is their use and implementation of recycled aluminium parts which, as a result, increase fuel efficiency and reduced emissions for their vehicles, and inclusion in the Dow Jones Sustainability Index (DJSI) for 17 years consecutively. BMW also provides its i-series lineup of vehicles that include the fully electric i3 and hybrid i8 models. These two vehicles are produced in their environmentally conscientious factory in Leipzig, Germany who's manufacturing process is powered fully by the company's own wind turbine system. Their other plant in Moses Lake, WA draws its energy from locally sourced hydropower. This strategy of environmental sustainability provides BMW with increased brand recognition, reduced costs, and tax benefits. Another strength that BMW possesses is its global sales and market presence. They have been and are currently expanding production and sales in many emerging markets and foreign

countries such as China, India, Brazil, South Africa, US, UK, and of course, Germany. This globalization strategy not only increases sales in all parts of the globe but decreases production costs by more efficient means of resource allocation. A unique factor of this is that they are completely independent of other automotive manufacturers and have no strategic joint ventures. This can be seen as both a strength and a weakness, but for the strong side, it helps with the brands reputation of being authentic and 100% German engineered.

BMW's product line is very diverse and is seen as a strength in the company. The reasoning behind this is that through product diversification, each target market can be attracted to different models that vary in utility and performance. Throughout their 18 different lines of vehicles, you can find price tags ranging from \$36,000- 163,000 USD.

The weaknesses that BMW face in the automotive industry are plentiful. Contrary to the strength previously stated, their product differentiation is high, but lacks in price point attractiveness relative to substitutes in the same market. Throughout their various models, their current offerings for electric vehicles lack in consumer value. Take the i3, for example, This vehicle is fully electric and has a starting MSRP of \$45,000. The total travel range per charge is 153 miles and contains a depressing acceleration rate of 0-60 mph in 7.2 seconds. The safety ratings for this line of vehicles have not been determined by the NHTSA, which is concerning. Through its 4 years in existence, the i3 has managed to accumulate 6 safety recalls. The i8 model, their other eco-friendly hybrid vehicle, shares similar weaknesses with starting MSRP of \$148,000-163,000, 0-60 in 4.4 seconds, and no NHTSA safety rating as well. As a consumer in the electric vehicle market, these options of luxury performance are unattractive in comparison to Tesla's model 3 and model S lineups. The model 3 provides a starting price of \$35,000 USD, 0-60 mph in 3.2 seconds (5.3 for standard), and an NHTSA safety rating of 5-stars. The model S

provides a price of \$76,000 USD, 0-60 mph in 2.4 seconds (4.1 for standard), and an NHTSA safety rating of 5-stars.

Another weakness that BMW possesses is its lack of strategic partnerships and high production costs. Though they aim to be dependent in order to maintain their exclusivity and brand reputation, this hurts them financially. The high startup costs of building assembly plants around the globe, as well as high material and labour, resulting in them having a higher price tag for consumers, which can be a make or break for certain markets. Due to the limited amount of experienced and skilled labour, pay rates for employees has skyrocketed compared to its competitors who are dependent on strategic alliances for production methods that utilize mostly machinery. This weakness of high costs also transfers to the consumer in the form of the product's lifetime cost. The lifetime cost for a vehicle that is made with limited and specialized parts is significantly higher than for a production vehicle whose internal parts may be easily interchangeable, as well as the lack of skilled labour for needed repairs.

The potential opportunities that BMW possesses are abundant and will be greatly effective if executed properly. As for any company, finding opportunities to improve is necessary for survival. Some of the important opportunities that BMW is currently facing can directly reduce their weaknesses through strategic alliances and the implementation of environmentally friendly innovation.

By engaging in strategic alliances with other auto manufacturers and suppliers, BMW can maintain a competitive edge through price reduction and distribution efficiency. When partnering with automotive manufacturers who specialize in mechanized assembly line production rather than highly skilled labour, the costs of production are greatly reduced. Though this opportunity poses a threat of quality assurance, the right strategic partnership and implementation of quality

checks throughout the assembly process would still maintain the detailed and prestigious brand perception that BMW thrives on. Due to the fact that BMW allocates its auto-parts and resources from hundreds of suppliers globally, there is room for supply chain error and fluctuating costs due to political, social, and environmental factors.

Another opportunity that this company faces is the current demand for autonomous vehicles and technology innovation. As automotive industries innovate its technology to provide value to their consumers, it is crucial for BMW to do the same in order to maintain a competitive edge. Currently, most automotive companies including BMW have products that possess automatic functionality such as steering and lane assist, self-parking, and stop and go traffic assistance. These features provide great customer value and have prevented many accidents and deaths. Tesla and Google have already released this technology in their vehicles and are capable of autonomous functionality. Coming this year, all Teslas will be able to detect traffic lights and stop signs. On the other hand, BMW current models provide drivers assistance systems up to level 2 autonomy. This means that they are partly automated and provide the driver with only basic controls such as lane and parking assist. According to their website, bmw.com, they have been testing highly automated driving on public roads and have a goal of reaching the consumer market in 2021. Even with this goal, their technology is still years behind that of Tesla and Google. With improved research and development, BMW has the opportunity to catch up in the fully automated driving experience and provide value into a new market of self-driving vehicles.

Another opportunity that BMW possesses is its implementation of environmentally friendly vehicles and production. As the world is becoming more and more environmentally conscious due to threats of global warming and increased pollution, people and governments are turning to more environmentally friendly means of production for their products. The threats that

we face with the current gas-powered vehicles are not only killing our planet but are killing our wallets as well. As previously mentioned, BMW currently has two production facilities that run on 100% renewable energy. According to their sustainability report, they aim to have all of their production facilities to be 100% renewable energy powered by 2020. They also currently produce two environmentally friendly vehicles. The i3, which is fully electric, and the i8 which is a hybrid. These two lines of products provide value to environmentally conscientious customers and complement their brand image in a socio environmental way. The continuance of BMW in the electric car industry is an important opportunity that they must engage in due to the limited supply of non-renewable resources. As oil prices continue to increase, this could pose a threat to BMW customers and secondary customers not wanting to give an arm and leg at the gas tank.

One of the largest threats that the BMW automotive group faces is the threat of increasing competition in the worldwide automotive market. With the current market offerings in the automotive industry, BMW has a firm hold in the luxury and performance markets. This firm hold is currently short term unless they provide alternative solutions for more price sensitive consumers seeking the same features. The opportunities for lower cost car companies to implement a stylish and inexpensive offering is high and gets higher every day with technological innovation. As technology innovation increases, production costs and luxurious functionality and performance becomes more available and affordable. This allows potential new entrants easy access and little barriers to entry if they possess higher innovation efficiency than BMW.

Another threat that BMW faces is their opportunity cost of not responding to environmental changes. As government environmental regulations are becoming stricter around

the globe, taxation and increased costs on non-renewable resources pose major threats to the company's profitability. Due to the fact that BMW sells its vehicles globally, they need to pay attention to the differentiating rules and regulations that are present in each geographic market.

When comparing the SWOT analysis for both Tesla Motors and BMW automotive, it is important to determine the most important underlying issues and compare them amongst each other. Both companies being in the automotive industry possess similar strengths, weaknesses, opportunities, and threats. Starting with the main difference between the two companies is their presence in the electric vehicle industry and their existence as a whole. Tesla is the first mover in this blue ocean of luxury and innovative performance electric vehicles. This is seen as a strength for them because they have efficiently and successfully utilized high standards of technological innovation in their products. Though they have only been around since 2003, they have paved the way for environmental sustainability and are the industry leader for electric vehicles. BMW, on the other hand, has been in the automotive industry for over 103 years and are one of the leaders of the luxury and performance of global automotive markets. Both possess the strength of product differentiation by providing many models that are appealing to different types of consumers, but BMW tends to lean towards the consumers who are less price sensitive. Part of BMW's strengths in brand recognition is that their product is expensive, so by default, it must be the best product, right? Tesla has proved otherwise by providing models at significantly fewer price points while providing equal, if not better, performance and luxury. Tesla's vehicles are not only quicker, smarter, and cheaper (depending on model), but they are also safer. Every one of their product's perfect NHTSA safety ratings proves that they possess both quality and effectiveness.

The weaknesses that both companies inherit are their high costs of production. Both BMW and Tesla face issues with high costs and share the same fact that they each produce their vehicles independently. The absence of strategic partnerships with existing auto-manufacturers results in high start-up costs and skilled labour cost. The other reasons for both companies high start-up costs differ drastically. For example, because Tesla is a new company, they lack the experience in the production of their vehicles and, as a result, have had to implement a trial and error system for increasing efficiency as well as high research and development. This weakness of high costs of production is short term for the company as they have been increasing production efficiency through taking on additional series of funding through convertible securities. BMW's high costs of production are due to their dependency on premium auto parts and highly skilled labour. Due to a global shortage of skilled labour, they have had to raise pay and increase resource allocation by using over a hundred different suppliers.

Opportunities that both companies face include technological innovation and price reduction. Unlike BMW, Tesla was founded with a goal in mind to do better for the planet and mankind. They strive to innovate in order to create an easier and cleaner world. Though their costs of research and development have been high and will likely continue to be so, their goals of price reduction are also foreseeable in the near future due to improved supply chain and production methods, and as long as this happens funding will not be an issue. BMW's opportunity to become more innovative is there, and they are attempting to do so effectively. Their technological innovation is years behind that of Tesla, as they are hoping to reach highly-autonomous vehicle by 2021. The opportunity of price reduction is present in both companies and is crucial in order to maintain a competitive edge due to the number of new entrants and substitute products for price-sensitive consumers.

The threats that both companies face are directly related to the opportunities for price reduction. The opportunity cost of not responding to the need for price reduction is very high and could potentially put these companies out of business. With established industry competitors releasing more affordable models with equal features, there is tension and increased competitive pricing hitting the automotive markets.

A competitive analysis is an essential part of a company's managerial duties to compare itself to the competition in many different ways. When conducting a competitive analysis, you want to dig deep into each competitor you are analyzing to see how they are currently operating and how they could operate in the future. One of the best ways to get a grasp of how a company is currently operating is to run a SWOT analysis on that company. When running our SWOT analysis on our competitors Ford, Nissan, and BMW we found that each company stands out in their own way. When comparing Tesla to the competition it is evident that they are the innovative leaders within the electric vehicle market.

Tesla is the world leader in innovative electric vehicle technology at this current time for many reasons. Out of the competition we took into account, Nissan is the biggest competitor in the EV market. Nissan produces the Leaf which is an inferior electric vehicle compared to any vehicle that Tesla produces. The most basic Tesla (Model 3 standard plus) has a greater driving range than the Nissan Leaf Plus which is the longest range EV they offer. The Leaf is the closest any competitor has ever come to creating a vehicle that can actually compare to a Tesla.

Although Tesla's whole fleet of electric vehicles are much more luxurious, and can out last the Nissan it is still a competitor. Competition creates a drive for Tesla to continue to stay ahead of other companies, and keep creating EVs with a higher value.

Ford, BMW, and Nissan have all proved themselves in automotive industry but now must adapt to the new electric market. Each company has increased investments in EV creation and could at any moment create a product that is better than a Tesla. The competitors have advantages over Tesla in many different ways including branding, larger resources, and the ability to generate income outside of the EV market. At this time the competitors core competency is gas engine vehicle production which has allowed them to become the dominant companies they are today. While Tesla is focused only on EVs, competitors can continue to sell their usual products while trying to research and develop a new electric vehicle. Costs associated with the companies' production of vehicles stays rather consistent because they operate at economies of scale. While trying to maintain a competitive edge over the companies that inhabit the EV market Tesla has faced issues in keeping production costs down due to the irregularity of the vehicle in their product line. Looking forward, Tesla should suspect that the competition will continue to grow as companies turn their weaknesses into opportunities. All of the current competition lack the ability to produce an electric vehicle that can surpass the Tesla. We are not saying that the competition doesn't have the ability to create a better EV, just saying that they have not done so yet. Changes Tesla should make to continue leading the EV market are not drastic, but should include cutting the cost of vehicles, increasing the range, and keep innovating valuable products. Energy is Tesla's core competency as they have created not only vehicles that run on it, but also powerful lithium-ion batteries for storing it, and solar panels to collect energy.

At this current time competition is high within the environmentally friendly vehicles which includes both electric vehicles and also hybrids that use electricity and gasoline. The movement away from gas and diesel powered vehicles has slowly started to take an effect which

is what has allowed Tesla to increase sales. Consumers will slowly shift toward electric vehicles which is great for Tesla who has already created many different products for consumers to choose from. Electric vehicles pose as a threat to Ford, BMW and others but are a huge strength for companies such as Tesla and Nissan. There is a minimal amount of EVs currently on the market which pushes consumers toward Tesla. Tesla has established a name for itself early on in electric vehicle market which will only continue to grow from this point.

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