



Strategic Plan – Tesla

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EXECUTIVE SUMMARY

Tesla, Inc. was founded by a group of engineers in 2003 as Tesla Motors. Tesla is a company that is committed to accelerating the world's transition to sustainable energy. Tesla not only has a strong grasp on the Electric Vehicle (EV) market, but is also prominent in the clean energy storage and generation markets, as well. This report will show that Tesla, through its innovation, commitment to its mission, and unique approach to business, will continue to thrive in the future with some strategic adjustments and improvements.

Tesla is unique in that it offers a very innovative technology that is seen in its products, such as the lithium-ion battery available in all-electric vehicles. Tesla launched its first vehicle, the Roadster, in 2008. The Roadster was a luxury vehicle that boasted top speeds of 125 mph with a performance similar to that of its gasoline-powered counterparts. Given the fact that the Tesla technology was new, costs to produce these vehicles were very high. Therefore, the Roadster was introduced as a luxury car, with a luxury price tag to match.

Commitment to the Mission

In order to further Tesla's mission and appeal to more of the population, Tesla has now offered a more affordable option in the EV market, the Model 3. Tesla has also built supercharging stations, Tesla Stations, across the nation. These stations combined with vehicles that can go from 235 to 300 miles on a single charge, have increased the practicality and desirability of owning a Tesla vehicle. Also, in order to promote the transition to clean energy generation and storage, Tesla designed batteries that were more equipped to store solar energy, purchased Solar City, and built Gigafactories. These facts help demonstrate Tesla's commitment to providing sustainable energy solutions.

Financial Aspects

Financially, Tesla has had struggles with stability and profitability. Tesla has been close to Bankruptcy, but has been able to pull through with the help of investors. Even though the numbers may have appeared bleak in the past, Tesla's recent numbers are very encouraging. In fact, Tesla's 2018 third quarter performance has shown a substantial increase in sales.

Generally, affordability and availability are factors that help increase sales growth. The research shows that sales have increased in countries where there are incentives offered for the purchase of electric vehicles and sustainable energy options, such as in China where they have seen a substantial increase in sales due to incentives. Sales growth is also increased in populations that can afford a Tesla EV, such as upper-middle class populations, and in larger metropolitan areas, where there is more availability.

Ahead of the Competition

In order to provide more affordable products that are available to more consumers, Tesla must improve manufacturing processes and increase productivity. Tesla is also unique in that it delivers directly to the consumer, cutting out the middle man, and, in this way, has the ability to further reduce the overall costs to consumer and potential profits to Tesla.

Competitively, Tesla is well equipped in the U.S. market. Tesla's technology is more advanced than many other electric vehicle producers. One reason for this is the fact that Tesla only manufactures all-electric vehicles. Tesla's competitors in the U.S. market usually focus more on gasoline-powered options, while offering a very small amount of options in electric vehicles. This means that Tesla is better suited to meet the needs of the consumer in the EV market. Now, with the availability of the Tesla Stations, Tesla has truly made the electric vehicle a viable option for cleaner transport. However, to remain competitive, Tesla will have to acknowledge the existence of possible competitors and take actions to stay ahead of the game.

Opportunities to Increase Profits & Market Presence

Tesla has many opportunities to increase market share in both electric vehicle markets and clean storage and generation markets. Tesla also has the technology to back-up its vision, but will need to take advantage of these opportunities and make them into reality. Tesla's production of the Gigafactories can be a huge advantage. These factories can help Tesla mass produce its batteries and sell on a large scale for both electric vehicles and other clean energy storage consumers. Mass production is an opportunity for Tesla to reduce costs overall.

Even though Tesla does have an international presence, they have an opportunity to expand that presence and increase profits, especially in countries with incentives for alternative sustainable energy solutions. China has had exponential growth in the EV market, largely due to the incentives offered to the EV consumer. Tesla has a small presence in China, but can increase that to really compete in the same EV market and increase overall profits. Tesla can take advantage of all these opportunities to increase brand awareness and reputation worldwide.

The Sky is the Limit

Overall, with an increased awareness and desirability of alternative sustainable energy solutions, Tesla has the opportunity to capitalize on this trend and not only be a leader in the United States, but the world. Tesla's technological advances have produced products that are of high quality and have the ability to perform at the same level as its clean energy challenged counterparts. Tesla is truly poised for global greatness if it can continue to provide quality products, improve the efficiency and consistency of the manufacturing process, and stay ahead of competitors. This report will provide a comprehensive analysis of Tesla, Inc. and our recommendations for valuable improvements.

INTERNAL ASSESSMENT – Part 1: Qualitative Analysis

Brief Project Introduction

Tesla Motors has captivated the electric car enthusiast audience since 2003. Many of its concepts and technology breakthroughs have reshaped the way consumers think about travel and what they expect out of their vehicle.

The purpose of this project is to complete an internal assessment of Tesla Motors, from reviewing its company vision and mission, to strategies and goals utilized, and analyzing the last

five years of financial performance. This internal assessment of Tesla provides both analysis of the qualitative dimensions of the business and a financial analysis. The internal assessment of Tesla reveals the tangible and intangible resources, capabilities, and core competences, as well as strategic strengths and weaknesses, which can affect Tesla's strategic competitiveness.

Brief Company Overview

Company name and location

Tesla, Inc., formerly Tesla Motors, is incorporated in Delaware with its headquarters and principal place of business located at 3500 Deer Creek Rd., Palo Alto, California, 94304.

Brief history and years in business

Tesla was founded in 2003 by a group of engineers to prove that it was possible to have an all-electric vehicle that was both functional and fun to drive. Tesla's original CEO was Martin Eberhard and CFO was Marc Tarpenning. In 2007, Eberhard resigned as CEO and in 2008 completely left the company. Investor Elon Musk replaced Eberhard as CEO in 2008. Musk was also Chairman of the Board until recent issues with the SEC forced Musk to step down from the chairman role, but was allowed to remain CEO.

In 2008, Tesla released its first car, the Roadster. The Roadster was the first all-electric, no emissions sports car on the market. According to company tests, the Roadster was comparable to its gasoline-powered counterparts. It could go from 0 to 60 miles per hour in less than 4 seconds and reach top speeds of 125 miles per hour.¹ The Roadster not only compared in performance, but in price, as well. The Original Roadster's base price was over \$100,000, definitely making the Roadster a luxury sports car. The Roadster's electric motor was powered by lithium-ion cells that could be recharged from a standard electric outlet. In company tests, the Roadster achieved up to 245 miles on a single charge.²

In 2012, Tesla halted production on the Roadster to focus on manufacturing the Model S. With a new body configuration, this model provided extra storage space and improved handling. The Model S had 3 available battery options with ranges of 235 to 300 miles to a single charge. Tesla also built supercharging stations, which became known as Tesla Stations, in order to provide Tesla owners places to charge their vehicles at no extra cost to the consumer.

Tesla also released cross-over versions of the all-electric vehicle, known as the Model X, and the Model 3. The Model 3 is a four door sedan that is a more economical option to appeal to more consumers.

Tesla not only builds all-electric vehicles, but has a large stake in clean energy generation and storage products. In 2015, Tesla unveiled a line of batteries to store solar energy. In 2016, Tesla purchased SolarCity, a solar panel company and the following year, 2017, changed its name from Tesla Motors to Tesla, Inc. This was done to show that Tesla was committed to providing alternative, sustainable energy solutions beyond the production of all-electric vehicles.

¹ Gregersen, E. & Schreiber, B.A. (n.d.). *Tesla, Inc.* In *Encyclopedia Britannica online*. Retrieved from <https://www.britannica.com/topic/Tesla-Motors>

² Gregersen, E. & Schreiber, B.A. (n.d.). *Tesla, Inc.* In *Encyclopedia Britannica online*. Retrieved from <https://www.britannica.com/topic/Tesla-Motors>

Business model

Tesla's business model consists of a three-pronged approach: direct sales, service, and supercharger network.³ Tesla has cut out the middle man and provides direct sales from manufacturer to consumer. Along with direct sales, Tesla also offers in-house financing solutions to its consumers.

As of the end of 2017, Tesla has 318 worldwide locations that offer showrooms, Service Plus centers (combination of showroom and service facilities), or service facilities.⁴ Not only that, but Tesla also offers mobile service technicians, called Tesla Rangers, that can travel to a consumer's home to work on their Tesla vehicles. The Model S is even able to download data, so that it can be worked on from online, remotely.

In order to make all-electric vehicles more appealing to the masses, Tesla has built Supercharger stations, called Tesla Stations. These stations allow consumers to fully charge their vehicles for free while away from home. A full charge takes approximately 30 minutes and these stations help make electric vehicles more functional by providing on the go charging options.

Key markets, activities and product lines

Tesla's key markets are electric vehicles, clean energy generation, and clean energy storage. Tesla built Gigafactory 1 to accommodate its clean energy storage solutions concepts, such as the Power Wall battery, and purchased SolarCity in 2016 to help accomplish Tesla's mission.

Key product lines consist of Tesla's all-electric vehicles, including: Model S, Model X, Model 3, and the Roadster. Tesla's energy lines consist of the Power Wall, Power Pack, and Solar Roof.

Key/senior executives

Tesla's senior executives are Elon Musk, as CEO; Deepak Ahuja, as CFO; and J.B. Straubel, as CTO. Musk was forced to step down as Chairman of the Board of Directors after an SEC violation and corresponding settlement. The new Chairman of the Board was just recently announced as Robyn Denholm.

Tesla's founders consisted of a group of engineers headed by Martin Eberhard, former CEO of Tesla, and Marc Tarpenning, former CFO of Tesla.

Vision, Mission, Corporate Values

Tesla's vision is to bring compelling mass market electric cars to market as soon as possible. This corresponds with Tesla's mission to accelerate the world's transition to sustainable energy. Similar to the vision and the mission of Tesla, the corporate values consist of providing the world with sustainable energy solutions that are appealing to the masses. In Tesla's automotive line, Tesla has focused on providing all-electric, no emission vehicles that are fun to drive and provide comparable performance to gasoline powered vehicles. In the energy line, Tesla has

³ Zucchi, K. (October 27, 2018). *What makes Tesla's business model different?* In *Investopedia*. Retrieved from <https://www.investopedia.com/articles/active-trading/072115/what-makes-teslas-business-model-different.asp>

⁴ Zucchi, K. (October 27, 2018). *What makes Tesla's business model different?* In *Investopedia*. Retrieved from <https://www.investopedia.com/articles/active-trading/072115/what-makes-teslas-business-model-different.asp>

focused on providing clean energy storage solutions to help make clean energy a viable energy alternative.

Stated Objectives

Tesla makes products accessible and affordable in order to accelerate the world's transition to clean transport and clean energy production. Tesla also focuses on safety within the work place and safety for the consumers. Tesla has made it a goal to have the safest factories in the world and is committed to designing the safest vehicles.⁵

Size

Tesla has an international presence with regular sales and service centers in Europe and the United States. Tesla also has delivery hubs in China and administration, service, and manufacturing facilities in the Netherlands. Overall, Tesla has 21 facilities worldwide and employs 37,543 full-time employees worldwide.⁶

Tesla reported revenues (in the 000s) of \$11,758,751 in 2017; \$7,000,132 in 2016; and \$4,046,025 in 2015.⁷ Tesla also reported gross profits (in the 000s) of \$2,222,487 in 2017; \$1,599,257 in 2016; and \$923,503 in 2015.⁸

Resources

Tangible Resources

Tesla has numerous tangible resources. In 2017, Tesla's tangible assets were valued (in 000s) at \$28,293,870; in 2016, they were valued at \$22,287,931; and, in 2015, they were valued at \$8,055,123.⁹ These resources consist of the physical property that Tesla owns, including manufacturing facilities and administration facilities. Tesla also owns the very large Gigafactory 1 and SolarCity. Tesla's supercharging stations are also a tangible resource for the company.

Amongst Tesla's tangible resources, inventory is also very valuable. Tesla's inventory items consist of the all-electric vehicles they produce, the manufactured parts of the electric vehicles that Tesla sells to other manufacturers, batteries and clean energy storage equipment.

Intangible Resources

Intangible resources are a little harder to identify. However, in 2017, Tesla's intangible assets were valued (in 000s) at \$361,502; in 2016, they were valued at 376,145; and, in 2015, they were valued at \$12,816.¹⁰ Some of Tesla's valuable intangible resources would be its intellectual property assets. Tesla's logo, itself, is a very well-known trademark. Trademarks lead to brand

⁵ Tesla News. (2018). Retrieved from <https://www.tesla.com>

⁶ Tesla 2017 10K Report. (2018). Retrieved from <https://www.tesla.com>

⁷ Tesla, Inc. – TSLA Company Financials. (2018). Retrieved from <https://www.nasdaq.com/symbol/tsla/financials?query=income-statement>

⁸ Tesla, Inc. – TSLA Company Financials. (2018). Retrieved from <https://www.nasdaq.com/symbol/tsla/financials?query=income-statement>

⁹ Tesla, Inc. – TSLA Company Financials. (2018). Retrieved from <https://www.nasdaq.com/symbol/tsla/financials?query=income-statement>

¹⁰ Tesla, Inc. – TSLA Company Financials. (2018). Retrieved from <https://www.nasdaq.com/symbol/tsla/financials?query=income-statement>

recognition and Tesla's logo is very much a well-recognized trademark. Along with trademarks and brand recognition is the goodwill of the company, which can prove to be an intangible resource.

Although Musk has shown a distaste to the idea of holding patents, Tesla does hold a number of valuable patents in the clean transport and clean energy fields. Even with making some of the technology for the Tesla electric vehicles public knowledge, Tesla has retained some valuable patents.

Tesla has a very innovative culture. This culture is a valuable resource, as well as Tesla's ability to use its Research and Development Department to further Tesla's innovative culture.

Capabilities & Core Competencies

Tesla's resources allow them to create capabilities that are unlike any of its potential competitors. The degree of innovation in its manufacturing and developing processes, make its capabilities more like core competencies. Since no other company is remotely close to doing what they are doing, this gives them an automatic competitive advantage. The technology is so far advanced in the development of not only the electric vehicle (EV), but also in the technology for the EV's storage batteries, which in turn can be used for the sustainable energy industry allowing Tesla the capacity to compete in 2 different industries.

The technology platform that Tesla has developed is positioning them to be the leading player in the sustainable energy industry. They have taken the sustainable energy technology beyond electric vehicles and have designed solar tiles, power walls, full home integrated energy systems, charging stations for EV's and grid scale energy storage systems. With its latest 5 billion dollar resource development, Gigafactory 1, just built, they should be able to soon start making all these technologies available on a mass scale. Gigafactory 1 is expected to have the capacity to pump out the Lithium-ion cell batteries that will power its expected production estimate of 500,000 Model 3 EV's per year.

One of Tesla's most valuable capabilities and, therefore, core competency, lies within the development of the Lithium-ion battery. Its technology team is constantly working to improve the battery's storage capacity as well as its new plant's ability to manufacture them. They just announced that its production rate has reached 20 GWh. This surpasses all other car battery manufacturers combined and is the highest volume produced in the world.¹¹ With the capabilities of Gigafactory 1 looking up to par, the development of a second Gigafactory, Gigafactory 2, is already under way to manufacture even more efficiently.

What may be considered Tesla's second most valuable capability is its Supercharging stations. In order to have electric vehicles, there has to be a way for people to charge their batteries. Tesla is the only company that is not only manufacturing EV's, but is also building charging stations

¹¹ Lambert, F. (Aug 2018). *Tesla confirms Gigafactory 1 battery production at 20 GWh – more than all other carmakers combined*. Electrek. Retrieved from <https://electrek.co/2018/08/02/tesla-gigafactory-1-battery-production-20-gwh/>

for them. The ability to charge the EV's battery for free will provide an extra reason for consumers to choose Tesla over other electric vehicle options.

Overall, Tesla has proven to have the capability of producing cutting edge products that are beyond what any other company is developing. Its ability and focus to develop its EV's to be like computers on wheels and be the safest, highest quality vehicles on the market, will enhance its reputation of good service and morality that can be trusted. This will supply the essentials to build a long lasting, loyal customer base and, thereby, securing a strong position in the market against any potential competition.

Business Model and Value Chain

Tesla has a distinctive business model that is considered to be one of the reasons why its stock has sky-rocketed since its introduction into the market. Tesla's three-pronged approach sets them up for long-term success, if implemented as planned. Its direct sales strategy and focus on superior customer service and satisfaction, is a business model that saves money and builds a loyal customer base. With its already developed showcase galleries combined with service centers and charging stations, they are beginning to reveal that this business plan design will, in fact, bridge the gap of what it takes to adopt electric cars as the new, truly viable and efficient means of transportation.

Tesla calls its business model the three-pronged approach: direct sales, servicing and supercharger network. Instead of selling its cars through franchised dealerships, like every other auto manufacturer, Tesla sells through company-owned galleries all over the world. These galleries are combined with service centers and are meant to fully engage the Tesla customer. Selling directly to the customer not only cuts costs, but contributes to building a better relationship with the customer and the ability to service their needs.

The compelling part of this section of Tesla's business model is direct sales. Direct sales is how it's worked out so well for Tesla, especially in its beginning phases of production. As a company who is developing a whole new product to a new segment of the auto industry, this is a smart way to cut costs since selling direct saves them money that they can, and have, put back into product development. At this point, they are obviously not trying to mass produce and sell cars, yet, but more or less showcase them. This gets Tesla's name out there and investors interested at what it has the ability to produce. With only a few of the first models being sold, they can get feedback and reviews that will allow them to fix any malfunctions before they begin mass production. When they do begin mass production, they will still sell directly to the customer with the intent of building a loyal customer base by staffing its sales channels with only "Tesla" sales employees, so there is no conflict of interest.¹²

The second prong of the business model, servicing, will involve the service centers being added to the Tesla Sales Centers. The plan is to have these 2 combined so that when a customer is contemplating purchasing a Tesla, they can see what the servicing looks like and how to go

¹² Zucchi, K. (October 27, 2018) *What makes tesla's business model different?* In *Investopedia*. Retrieved from <https://www.investopedia.com/articles/active-trading/072115/what-makes-teslas-business-model-different.asp>

about it. Besides, with service centers, the ability for the customer to easily service their vehicles is the main focus of the second prong. Tesla's plan is to offer mobile technicians that will go to your vehicle to troubleshoot, if need be, which would be called Tesla Rangers.¹³ They would like to get to the point where this service would not even be needed because they are close to developing the ability to wirelessly upload data from the vehicle allowing technicians to troubleshoot the car over the web without having to travel to the vehicle.

The third prong of the business model is its Supercharger Network. This section of the business model is still under development, but the ability for customers to easily charge their vehicles is the only obstacle standing in the way of the EV's being massively adopted. As charging stations are continuously being built across the US, Europe, and Asia, charging times are still much longer than that of pumping gas and they are still working on developing ways of charging EV batteries easier and making the process more convenient. One idea is switching out depleted batteries with freshly charged batteries at the charging stations, making the transition faster than pumping gas.

Along with this three-pronged model, there is an added service they want to use that will support the customer's ability to afford to buy not only Tesla's vehicles but eventually its whole powertrain package and components. Tesla not only sells EV's but also sells what is called powertrain systems that will supply your home's energy needs, as well as charge your vehicle. The plan for the loans and leasing programs will allow customers to afford to purchase these systems, where they will see the ability to pay back these loans much easier due to the money they save from not having to purchase energy.

Even though its business model hasn't necessarily made them the most profitable, yet, it is a long-term, sustainable model that is designed for long-term profits, as opposed to quick, short-term profits. It is a combination of ways to cut costs with how to keep loyal customers happy. By not using dealerships, offering free charging stations, customers not having to worry about oil changes and possibly getting low emissions tax credits, Tesla has added value to the company that make them money indirectly by keeping customers happy and loyal to the Tesla brand.

Tesla makes the majority of money from the sales of EV's, which account for 85%. The other 15% is from the sale of energy generating products/storage and Tesla services. So far, Tesla has produced two Model EV's and grossed a total of \$300 million in combined sales. With the projected mass production of the new Model 3 falling way short in 2017, by more than half, they still delivered 100,000 vehicles, which was a record for the company.¹⁴ Luckily, the sales of its first 2 model vehicles continued to rise and kept them afloat from its failure in production.

¹³ Zucchi, K. (October 27, 2018) *What makes tesla's business model different?* In *Investopedia*. Retrieved from <https://www.investopedia.com/articles/active-trading/072115/what-makes-teslas-business-model-different.asp>

¹⁴ DeBord, M. (Jan 2018) *Tesla's Model 3 deliveries were awful – but the company still set a sales record for 2017*. Business Insider. Retrieved from <https://www.businessinsider.com/teslas-model-3-deliveries-awful-but-company-sales-record-for-2017-2018-1>

Another way that Tesla planned on making/saving money through the value chain is through its new Gigafactory. The large design, in fact the largest in the world, allows them to mass produce its EV battery which would cut costs from the increase in economies of scale. This was to meet the demand of the projected mass production of Model 3's which, even though fell short this last year, will hopefully, eventually, reach close to expectations and the need for the EV battery will allow them to save money through its \$5 billion Gigafactory.

Strategic Intent

In the past, Tesla has shown a decided lack of marketing, priding itself on a \$0 marketing budget. However, it is our intent to spend a little money on marketing in order to make a better profit for the company. Although Tesla is not unheard of, it is still a mystery to some. When people think of Tesla, they think of high priced, luxury electric vehicles. This is not a bad thing, but many people do not know that Tesla has come out with a more affordable option in the Model 3. This model can appeal to many of the people that may automatically hear the name "Tesla" and dismiss it because they think it is above their price range.

Many people are also unaware of Tesla's advancements in the clean energy generation and storage field. A little bit of strategic marketing could make people more aware of everything Tesla has to offer. Tesla could emphasize that, although there is an initial cost for the consumer, there are also numerous grants and even tax credits for going green. This could help potential consumers realize the benefits in upgrading to clean energy.

For years now, Tesla has been unable to make a net profit. This is largely due to the high costs of manufacturing its electric vehicles. Tesla should pursue options to reduce these manufacturing costs. This can be accomplished by reducing labor hours; reducing production times, quantities, and costs by streamlining production; and, in general, Tesla can analyze operations to reduce overhead. With the reduction in overhead, Tesla will be able to manufacture vehicles that are turning a profit for Tesla.

Long-Term Objectives

In the long-term, our objectives would be to have Tesla accomplishing its mission to accelerate the world's transition to sustainable energy while also producing increasing net profits for the company. Our objectives are for Tesla to reduce production costs, promote the Tesla product to more consumers, and bring more interest, and business, to Tesla's clean energy generation and storage side. Another long-term goal is to see that this less known energy generation and storage side of Tesla, will start to provide even more profits for Tesla by supplying the consumer with Tesla's innovative clean energy solutions.

Current Strategies

Tesla's vision, to accelerate the advent of sustainable transport by bringing compelling mass market electric cars to market as soon as possible, is still its goal today.¹⁵ Tesla is also committed to making positive progress with newer product and software development, such as the Model 3, Autopilot, and the Solar Roof.

¹⁵ The Mission of Tesla. (2013). Retrieved from <https://www.tesla.com>

Tesla's strategy has been to infiltrate the automotive industry and provide a new, different way for consumers to purchase cars. Tesla has eliminated the middle man and the traditional (not so wonderful) dealership experience. Tesla is currently making its vehicles more desirable by providing Tesla Stations, similar to gas stations, but for electric vehicles.

Tesla is also currently involved in the clean energy generation and storage and has built the Gigafactory 1, and is in the process of building Gigafactory 2, to expand upon the innovative Lithium-ion batteries. Tesla's strategy is to provide more options for clean transport and clean energy productions and make these options available to the public as quickly as possible.

Strategic Synthesis – Qualitative Analysis

From a qualitative assessment standpoint, the strategic implications of focusing on long-term competitive advantage, through innovation, developing quality products, and providing superior customer service, has kept investors interested and sales just high enough to keep the company moving forward. The strengths of this strategy are that these focal points will, in the long-run, lead to customer loyalty and build a strong, trusting brand name.

The weaknesses shown thus far, are that the degree of innovation they are trying to achieve is causing set-backs, inaccurate production projections, and has cost a substantial amount more money than they originally intended to spend. It has also put some delay in its ability to produce the degree of quality they would like to achieve because malfunctions and performance are still somewhat of an issue. There also comes a bit of disconnect from the majority of consumers if a product is *too* innovative. There will be the few that accept it, but it takes longer for the rest to get comfortable with new innovative idea and finally want to try it. This might lead to consumers choosing already trusted name brands.

INTERNAL ASSESSMENT – Part 2: Financial Analysis

Profitability Ratios

The Profitability Ratios include ratios such as, gross profit margin, operating profit margin, net profit margin, and return on equity. The gross profit margin “measures profit generated after consideration of cost of products sold” and it is calculated by dividing the gross profit by the net sales.¹⁶ The operating profit margin is calculated by dividing the operating profit by the net sales, and it reveals the profit that is generated after the operating expenses are deducted. Likewise, the net profit margin is calculated by dividing Tesla's net profit by its net sales. The net profit margin is one of the most valuable profitability ratios, because it actually measures the overall profit generated after all expenses and revenues are deducted.

¹⁶ Fraser, L. M., & Ormiston, A. (2013). *Understanding financial statements* (10th Ed.). Upper Saddle River, NJ

Finally, the return on equity ratio is important because, it reveals the rate of return on the stockholders', or the owners', investment. The return on equity profitability ratio is calculated by taking the net earnings and dividing it by the stockholders' equity.¹⁷¹⁸¹⁹²⁰²¹

| KEY RATIOS | Unit/Currency | 2017 | 2016 | 2015 | 2014 | 2013 |
|-----------------------------------|---------------|---------|----------|--------|--------|--------|
| EPS (Earnings per Share) | USD | -7.47 | -4.68 | -6.93 | -2.36 | -0.62 |
| Book Value per Share | USD | 25.1 | 29.42 | 8.25 | 7.25 | 5.42 |
| Cash Value per Share | USD | 19.95 | 21 | 9.11 | 15.16 | 6.87 |
| Profitability Ratios | | | | | | |
| Gross Margin | % | 18.9 | 22.85 | 22.82 | 27.57 | 22.66 |
| Operating Margin | % | -13.88 | -9.53 | -17.71 | -5.84 | -3.04 |
| Net Profit Margin | % | -16.68 | -9.64 | -21.96 | -9.19 | -3.68 |
| Profit Markup | % | 23.31 | 29.61 | 29.58 | 38.06 | 29.3 |
| PBT Margin (Profit Before Tax) | % | -18.79 | -10.66 | -21.64 | -8.9 | -3.55 |
| Return on Equity | % | -46.29 | -14.2 | -82 | -32.25 | -11.09 |
| Return on Capital Employed | % | -7.78 | -3.96 | -13.63 | -5.01 | -3.52 |
| Return on Assets | % | -7.64 | -4.39 | -12.79 | -7.13 | -4.19 |
| Return on Fixed Assets | % | -7.39 | -4.07 | -13.56 | -7.04 | -5.32 |
| Return on Working Capital | % | 147.81 | -154.19 | 2468.7 | -17.4 | -10.37 |
| Growth Ratios | | | | | | |
| Sales Growth | % | 67.98 | 73.01 | 26.5 | 58.85 | 387.23 |
| Working Capital Growth | % | -355.12 | -1590.89 | 102.71 | 81.61 | -4220 |
| Cost Ratios | | | | | | |
| Operating Costs (% of Sales) | % | 113.88 | 109.53 | 117.71 | 105.84 | 103.04 |
| Administration Costs (% of Sales) | % | 21.06 | 20.46 | 22.79 | 18.87 | 14.18 |

¹⁷ Tesla, Inc. (2017). *Annual report on form 10-K*. Retrieved from <http://ir.tesla.com/sec-filings/sec-filing/10-k/0001564590-18-002956>

¹⁸ Tesla, Inc. (2016). *Annual report on form 10-K*. Retrieved from <http://ir.tesla.com/static-files/005f750d-f936-44cf-9721-9a89e4c466da>

¹⁹ Tesla, Inc. (2015). *Annual report on form 10-K*. Retrieved from <http://ir.tesla.com/sec-filings/sec-filing/10-k/0001564590-16-013195>

²⁰ Tesla, Inc. (2014). *Annual report on form 10-K*. Retrieved from <http://ir.tesla.com/sec-filings/sec-filing/10-k/0001564590-15-001031>

²¹ Tesla, Inc. (2013). *Annual report on form 10-K*. Retrieved from <http://ir.tesla.com/sec-filings/sec-filing/10-k/0001564590-15-001031>

Liquidity, Leverage, and Efficiency Ratios

Liquidity Ratios such as the current ratio and the quick ratio, also known as the acid-test, measures the short-term liquidity of the company. The current ratio is calculated by dividing the current assets by the current liabilities, which reveals Tesla's ability to meet needs for cash as they come up. The quick ratio, or acid-test, also looks at the short-term liquidity of Tesla, however, it is more rigorous than the current ratio in that it eliminates inventory. Inventory is deducted from the current assets and then it is divided by the current liabilities to reveal Tesla's quick ratio.

One of the more important leverage ratios is the debt to equity ratio, which measures Tesla's debt relative to its equity base. The debt to equity ratio is calculated by taking the total liabilities and dividing it by the stockholders' equity.

Finally, Efficiency Ratios, also known as Activity Ratios, measures the liquidity of specific assets and the efficiency of the firm in managing assets. For example, the inventory turnover ratio reveals Tesla's efficiency in managing and selling its inventory. Inventory turnover is calculated by taking the cost of goods sold and dividing it by the inventory.¹⁷¹⁸¹⁹²⁰²¹

| KEY RATIOS | Unit/Currency | 2017 | 2016 | 2015 | 2014 | 2013 |
|---------------------------|---------------|-----------|-------|-------|-------|-------|
| Liquidity Ratios | | | | | | |
| Current Ratio | Absolute | 0.86 | 1.07 | 0.99 | 1.51 | 1.88 |
| Quick Ratio | Absolute | 0.56 | 0.72 | 0.54 | 1.06 | 1.37 |
| Cash Ratio | Absolute | 0.44 | 0.58 | 0.43 | 0.9 | 1.25 |
| Leverage Ratios | | | | | | |
| Debt to Equity Ratio | % | 2.43 | 1.5 | 2.49 | 2.73 | 0.91 |
| Net Debt to Equity | Absolute | 1.64 | 0.79 | 1.38 | 0.64 | -0.36 |
| Debt to Capital Ratio | % | 0.71 | 0.6 | 0.71 | 0.73 | 0.48 |
| Efficiency Ratios | | | | | | |
| Asset Turnover | Absolute | 0.46 | 0.46 | 0.58 | 0.78 | 1.14 |
| Fixed Asset Turnover | Absolute | 0.66 | 0.69 | 1.04 | 1.72 | 2.39 |
| Inventory Turnover | Absolute | 4.4 | 3.23 | 2.8 | 3.58 | 5.12 |
| Current Asset Turnover | Absolute | 1.83 | 1.55 | 1.36 | 1.44 | 2.25 |
| Capital Employed Turnover | Absolute | 0.56 | 0.42 | 0.77 | 0.86 | 1.16 |
| Working Capital Turnover | Absolute | | 16.17 | | 2.98 | 3.41 |
| Revenue per Employee | USD | 313207.55 | | | | |
| Net Income per Employee | USD | -52244.09 | | | | |
| Capex to Sales | % | 34.71 | 20.58 | 40.41 | 30.32 | 13.12 |

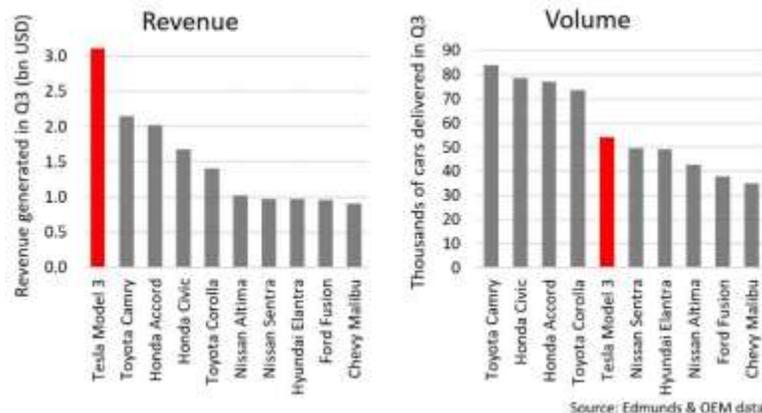
| | | | | | | |
|--------------|---|-------|-------|-------|-------|-------|
| R&D to Sales | % | 11.72 | 11.92 | 17.74 | 14.53 | 11.52 |
|--------------|---|-------|-------|-------|-------|-------|

Strategic Synthesis – Financial Analysis

While Tesla, Inc. is known for its innovation in the electric automobile arena, they have struggled with financial stability and overall profitability. While in 2016, Tesla made some strong headway towards improving its net profit margin from the previous years -17.71% to 2016's net profit margin of -9.53% they once again dipped back down in 2017 with a net profit margin of -16.68%. Tesla has struggled with high production costs and overhead, which has ultimately reduced its ability to turn a profit.

In fact, Tesla's setbacks and unstable financial picture has had them on the brink of bankruptcy more than once.²² Part of the challenges Tesla has faced financially is a large amount of debt, its only saving grace has been its high quality and high performance automobiles and a tremendous amount of capital to keep them from bankruptcy.²³

Thus far, in 2018, Tesla has shown some promising financial results. In Q3, Tesla has increased its automotive revenue by 82% sequentially over Q2.²⁴ By the end of Q3, Tesla's Model 3 ranked as the best-selling car in the US with regard to revenue generated, and they increased its overall volume production, ranking the Model 3 as the 5th best-selling vehicle in terms of volume.



Another positive financial improvement for Tesla in Q3 2018, was the notable 30% reduction of labor hours per Model 3.²⁴ Tesla is working to further reduce its production and labor costs, while increasing its efficiency with production to market.

²² Thompson, C. (2017). *How Tesla emerged from the brink of bankruptcy to become America's coolest car company*. Retrieved from https://www.businessinsider.com/most-important-moments-tesla-history-2017-2?utm_source=email&utm_medium=referral&utm_content=topbar&utm_term=desktop&pt=385758&ct=Sailthru_BI_Newsletters&mt=8&utm_campaign=email_article

²³ McDonald, T. (2017). *Tesla stock: Capital structure analysis (TSLA)*. In *Investopedia*. Retrieved from <https://www.investopedia.com/articles/markets/052316/tesla-stock-capital-structure-analysis-tsla.asp>

²⁴ Tesla, Inc. (2018). *Tesla third quarter 2018 update*. Retrieved from <http://ir.tesla.com/static-files/725970e6-eda5-47ab-96e1-422d4045f799>

Tesla increased its service locations, resulting in 351 new locations world wide and successfully opened four new store locations by the end of Q3, 2018. Tesla opened 44 new Supercharge locations, bringing its overall Supercharging connectors to 11,000 and just over 20,000 Destination Charging connectors globally. Growth continued for the energy storage deployments, which “grew to 239 MWh, an increase of 18% sequentially and 118% compared to Q3 2017.”²⁴

Overall, 2018 is shaping up to be a big improvement for Tesla financially. They have successfully reduced its capital expenditures to \$510 million, an improvement over Q2 2018. Finally, Tesla was able to repay \$82.5 million in bonds, to increase its cash position by \$731 million. The financial trajectory for Tesla, Inc. is positive after closing out Q3 2018.

Strategic Synthesis – Overall Internal Assessment

In conclusion, we would recommend that Tesla, Inc. continue on the financial trajectory they closed out Q3 2018 with, by reducing overall production and labor costs; reducing debt; and repaying loans, to ultimately move towards producing a positive net profit margin. While Tesla has struggled with debt, danced on the brink of bankruptcy, and not been successful with producing overall profit, they are pushing the envelope of innovation. With the release of the Model 3, Tesla has finally hit a price point consumers like, with reduced production and labor costs, and increased volume and demand.

The internal assessment reveals marketing and essentially a rebranding messaging campaign to inform consumers about the more affordable price point option of the Model 3. A fresh new marketing campaign focused on educating consumers about the new wave of energy efficiency in transportation and the capabilities, as well as the rapid expansion of charging stations, would go a long way to providing a lift for the company’s bottom line.

With the risk of innovation, comes the challenges, as well as the rewards after a long journey to create new products and ultimately change the way consumers view transportation and energy efficiency.

EXTERNAL ASSESSMENT – Part 1: General Environment Analysis

External assessments provide a firm with an analysis of possible risks to the firm. These assessments analyze external factors such as trends in the economic environment and political environment to what kind of risks may be harmful to the firm. External assessments also look at the competition and the market to anticipate possible threats, as well.

This external assessment will provide an analysis of different environments and competitors to provide valuable information for Tesla. Tesla will be able to use this information to adapt to outside influences and prepare for possible threats from the external environment.

Geographic Environment

Trends

Global sales from 2015 to 2016 increased by almost 50%. The country with the highest sales is the United States. Other countries that have shown a rise in sales over the years include Norway, Finland, Sweden, China, Hong Kong, United Kingdom and Canada. In the United States, California has reached almost 8% of the EV market share followed by Washington at 3.5% and New York and Florida with between 1-2%.²⁵

Opportunities

China has grown to become the 2nd largest economy in the world. With Tesla's plan of building its 2nd Gigafactory in China, there is a huge opportunity for sales growth. Other opportunities for Tesla are for its Energy division of the company. Tesla's energy storage systems and powertrains are very attractive to countries that do not have mature energy infrastructures in place, such as Africa.²⁶

Threats

Some states have either passed laws or strictly enforced existing laws to not allow the direct sale of automobiles to consumers. This limits Tesla's ability to target these states which include Michigan, Colorado, Texas, and North Carolina. Other threats include the effects of the trade war between the U.S. and China. Increased tariffs on China imports caused China to retaliate and increase tariffs on US auto imports, up to 40%. Tesla is hoping that with the construction of the Gigafactory in China, this will help bypass this tariff increase and make its vehicles more affordable to the Chinese consumer.²⁷

Demographic Environment

Trends

The average age of the consumer for Tesla's EV is between 44 and 55 years. The average income of consumers of the Model 3 and S is \$200K, while the average income of the consumer of the Model X is \$450K. Major metropolitan areas tend to be most likely to purchase Tesla's EV's.²⁸

Opportunities

²⁵ McDonald, L. (July 2018). *Please stop saying "EVs are only 1% of auto sales in the US"*. Clean Technica. Retrieved from <https://cleantechnica.com/2018/07/01/please-stop-saying-evs-are-only-1-of-auto-sales-in-the-us/>

²⁶ Niu, E. (Jan 2016) *2 Important Long-Term Opportunities for Tesla Motors that have Nothing to do with Cars*. The Motley Fool. Retrieved by: <https://www.fool.com/investing/general/2016/01/24/2-important-long-term-opportunities-for-tesla-moto.aspx>

²⁷ Jiang, E. (Nov 2018). *Tesla says report stating sales in China crashed 70% in October is "wildly inaccurate"*. Markets Insider. Retrieved from <https://markets.businessinsider.com/news/stocks/tesla-stock-price-china-sales-crash-trump-trade-war-bites-2018-11-1027759040>

²⁸ Melinda, V. (Jan 2017). *Tesla S/X/3 costs & demographic study*. 3 Model 3 Owners Club. Retrieved from <https://model3ownersclub.com/threads/tesla-s-x-3-costs-demographic-study.2429/>

Tesla Energy is aiming to target emerging markets they do not have a mature energy infrastructure. This is where they can easily implement its micro-grid systems. Countries like Norway, Sweden and Iceland have attractive incentives for citizens that want to invest in alternative energy and purchase EV's. A number of countries are increasing the incentives offered in an attempt to address climate change, such as Japan and the United Kingdom.²⁹

Threats

Tesla's main manufacturing facility is located in California, one of the most expensive states to manufacture products. Finding enough skilled workers for its California plant could cause a delay in production. Most of the population in the Bay area, where the facility is located, are coders and electrical engineers.³⁰

Economic Environment

Trends

Countries, such as, Norway, Finland, Sweden, and Denmark, are focusing on alternative energy and purchasing more EV's, as well as increasing interests in Tesla's Energy products, such as solar tiles and Tesla's powerwalls. As energy solutions become more widely accepted and popular, Tesla's products become more appealing.³¹

Opportunities

Tesla Energy has great opportunities in targeting businesses and utility companies. Countries that offer incentives, often have attractive incentives for businesses to help influence investment in alternative energy. Again, countries that have undeveloped energy systems will lean toward implementing sustainable systems, as opposed to the outdated, harmful conventional systems.³²

Threats

The economy does not appear favorable for the powerwall market in the U.S. Most U.S. consumers pay a flat rate for its energy and it is much more affordable at this point.³³

Political/Legal Environment

Trends

²⁹ Gibson, R. (Sept 2017). *Which countries have the best incentives for EV purchases?*.

Fleetcarma. Retrieved from <https://www.fleetcarma.com/countries-best-incentives-ev-purchases/>

³⁰ Gardner, G. (April 2016). *Tesla faces five big challenges*. USA Today. Retrieved from <https://www.usatoday.com/story/money/cars/2016/04/10/tesla-faces-five-big-challenges/82859740/>

³¹ Kissinger, D. (June 2018). *Tesla, Inc. PESTEL/PESTLE analysis & recommendations*. Panmore Institute. Retrieved from <http://panmore.com/tesla-motors-inc-pestel-pestle-analysis-recommendations>

³² Niu, E. (Jan 2016). *2 Important long-term opportunities for Tesla Motors that have nothing to do with cars*. The Motley Fool. Retrieved from <https://www.fool.com/investing/general/2016/01/24/2-important-long-term-opportunities-for-tesla-moto.aspx>

³³ Kissinger, D. (2018). *Tesla, Inc. PESTLE/PESTAL analysis & recommendations*. Retrieved from: <http://panmore.com/tesla-motors-inc-pestel-pestle-analysis-recommendations>

Political and legal factors have a significant impact on Tesla, as well as the automotive industry and other energy solutions industries.³⁴ One of the major political trends impacting Tesla includes increased focus on minimizing carbon emissions. Overall, the current political and legal environment presents many growth opportunities for the energy solutions automotive industry.

Opportunities

Governmental incentives for consumers with electric automobiles and certain energy solution based products, creates a tremendous opportunity for Tesla.³⁵ Tesla, Inc. has the ability to improve its financial performance as the trend to reduce carbon emissions increases, and the government continues to offer incentives to consumers. Energy consumption regulations can be viewed as an opportunity for Tesla.

Changes within global trade agreements also has created opportunities for Tesla and its energy efficiency focused consumers. The expansion of free trade agreements opens the door to many opportunities for companies to expand its operations internationally. Additionally, the expansion of international patent protection presents a strong opportunity for Tesla.

Finally, political stability in most of the major markets can also be seen as an opportunity.

Threats

With the rapidly evolving political and governmental changes in the United States, the fear of political instability in the major markets can be viewed as a threat.

The legal constraints on Tesla's marketing mix, the company's business partnerships, and on the human resources management can be seen as a threat. The dealerships within the United States have sales regulations that also could be viewed as a threat.³⁶

Currently, there are more opportunities than threats for Tesla regarding the political environment.

Socio-Cultural Environment

Trends

The current socio-cultural environmental trends impact Tesla, Inc.'s macro-environment or remote environment through customers, employees, and investors.³⁷ Popular trends such as, wealth distribution in developing markets, creating renewable energy, and living a low-carbon footprint lifestyle are favorable socio-cultural changes for Tesla.

Opportunities

³⁴ Kissinger, D. (2018). *Tesla, Inc. PESTLE/PESTAL analysis & recommendations*. Retrieved from: <http://panmore.com/tesla-motors-inc-pestel-pestle-analysis-recommendations>

³⁵ Kissinger, D. (2018). *Tesla, Inc. PESTLE/PESTAL analysis & recommendations*. Retrieved from: <http://panmore.com/tesla-motors-inc-pestel-pestle-analysis-recommendations>

³⁶ Kissinger, D. (2018). *Tesla, Inc. PESTLE/PESTAL analysis & recommendations*. Retrieved from: <http://panmore.com/tesla-motors-inc-pestel-pestle-analysis-recommendations>

³⁷ Kissinger, D. (2018). *Tesla, Inc. PESTLE/PESTAL analysis & recommendations*. Retrieved from: <http://panmore.com/tesla-motors-inc-pestel-pestle-analysis-recommendations>

Tesla has done an incredible job aligning its business with social trends in the target market, energy efficient focused consumers. There continues to be an increased popularity in creating an energy efficient low-carbon and renewable energy lifestyle.

Another area of opportunity for Tesla is the focus on improving wealth distribution in developing markets.

Threats

The perception or fear of economic instability could be seen as a threat for Tesla.

Global Environment

Trends

The global environment for electric vehicles is on the rise. Last year, global sales surpassed a million units for the first time.³⁸ According to McKinsey's analysis of the current electric vehicle growth trajectory, producers could almost quadruple sales to 4.5 million units by 2020.³⁹ The Chinese market expanded by 72 % over last year which means that the Chinese electric vehicle market is now larger than the United States and European market combined. Subsidies and tight regulations account for a large part of the expansion in the Chinese market.

The global environment for renewable energy sources is also on the rise. From cities to corporations, renewable energy sources are being incorporated into the home and the workplace.⁴⁰ These trends will likely continue to strengthen through the deployment of new technologies and the acceleration of national energy transitions globally.⁴¹

Opportunities

With the global environment trending towards electric vehicle production, Tesla has an opportunity to capitalize on this trend. Although the United States market is lagging behind the Chinese market, Tesla has the opportunity to take advantage of this trend towards electric vehicles. There are rebates for the purchase of electric vehicles in the United States, but these incentives can be increased to encourage the purchase of Tesla's zero emissions, all electric vehicles. Tesla has the opportunity to lobby for better incentives and then use those incentives to market its electric vehicles to the public.

³⁸ Hertzke, P., Muller, N., Schenk, S., & Wu, T. (May 2018). *The global electric-vehicle market is amped up and on the rise*. Retrieved from <https://www.mckinsey.com/industries/automotive-and-assembly/our-insights/the-global-electric-vehicle-market-is-amped-up-and-on-the-rise>

³⁹ Hertzke, P., Muller, N., Schenk, S., & Wu, T. (May 2018). *The global electric-vehicle market is amped up and on the rise*. Retrieved from <https://www.mckinsey.com/industries/automotive-and-assembly/our-insights/the-global-electric-vehicle-market-is-amped-up-and-on-the-rise>

⁴⁰ Motyka, M., Slaughter, A., & Amon, C. (2018). *Global renewable energy trends: Solar and wind move from mainstream to preferred*. Retrieved from <https://www2.deloitte.com/insights/us/en/industry/power-and-utilities/global-renewable-energy-trends>

⁴¹ Motyka, M., Slaughter, A., & Amon, C. (2018). *Global renewable energy trends: Solar and wind move from mainstream to preferred*. Retrieved from <https://www2.deloitte.com/insights/us/en/industry/power-and-utilities/global-renewable-energy-trends>

Tesla also has the opportunity to utilize its innovative technology to cash in on the trend towards increased usage of renewable energy sources. Tesla can market its clean energy solutions created by the Gigafactory and SolarCity to consumers that are increasingly demanding new clean alternatives to energy that are cost efficient and environment friendly.

Threats

With the increasing market for electric vehicles, comes an increased risk of competition. Although Tesla holds a large stake in the United States market for electric vehicles, competing vehicle manufacturers are beginning to truly focus on providing an electric vehicle that can compete with Tesla. Since Tesla has made a large amount of information involving its technology public, other manufacturers may possibly begin to build upon this technology to create electric vehicles that can compete on the same level as the Tesla models.

Similarly, competing clean energy companies are also trying to capitalize in the increasing trends towards clean, renewable energy sources. The technology utilized in the Tesla battery packs and solar products is top of the line, but, with a trend towards an increasing market for renewable energy, competitors have more motivation to provide products that can compete with Tesla.

Technology Environment

Trends

Tesla has shown that it is possible to create an all-electric vehicle that functions like a gasoline-powered vehicle. The trend in technology is to provide electric options to consumers that will make electric vehicles a viable option for both city and long distance travel. The technology for electric vehicles has come a long way and is able to offer consumers a vehicle that can go hundreds of miles in a single charge, as seen with Tesla.

Technology is trending towards an increase in clean, renewable energy generation and storage, as well. With incentives for using alternative energy solutions, consumers are looking to see what is available. This demand is pushing manufacturers, such as Tesla, to continue to strive for technological advances that will make this type of alternative energy solutions more affordable and convenient for the consumer.

Opportunities

The trend towards increasing technological advances in both electric vehicles and alternative energy solutions provides many opportunities for Tesla. Tesla has the innovative spirit and the ability to make these technological advances a reality and to offer the consumer products that are appealing and affordable. Although Tesla's first launch of the electric vehicle was an expensive luxury model, Tesla's Model 3 is now being offered at a much more affordable price and this shows that Tesla is able to offer options for everybody.

Threats

Tesla has made great strides in the advancement of technology for both electric vehicles and clean energy solutions. Although this may put Tesla ahead of the game in the technology

department, Tesla is unique in that it has not gone to great lengths to hide the technological advances. Elon Musk, CEO of Tesla, has an admitted dislike of patents and, although Tesla has registered some patents, Tesla has also made much of its technology available to the world. Sharing this information has given competitors the opportunity to use Tesla's very own innovation to make products that are also appealing and affordable for the consumer.

Strategic Synthesis – General Environment

The trends revealed in the assessment of Tesla's general environment, show that affordability and availability increases sales growth. Whether it be incentives or the price reductions in the retail price of vehicles, sales have increased in countries with more incentives. Sales have also increased amongst the population that can afford a Tesla, mainly being upper-middle class that resides in the bigger cities, where there is more availability. Opportunities will continue to arise as governments continue to offer incentives to consumers, as well as businesses. The threats of laws denying Tesla the ability to sell direct to consumers are beginning lessen. Although, some states are more heavily regulated in order to protect their own auto industry from competition, other states have deregulated these laws and have allowed direct sales to consumers.

As Tesla continues to improve processes and increase productivity, they will be able to lower prices and become more affordable to the majority of consumers. With infrastructures in place, consumers will begin to see the transformation over to electric as a reality that is attainable and convenient. Also, if they continue to implement manufacturing facilities all over the world, they will lessen the effects of tariffs and other shipping costs that threaten its ability to keep costs low enough for Tesla's consumers. With the many opportunities they have to sell in multiple markets, staying diversified in the products they sell, will help them keep a competitive advantage, especially with products that can be produced on a mass scale. This will lock Tesla into being a solid leader in the energy industry as we move into the future of renewable energy.

EXTERNAL ASSESSMENT – Part 2: Industry & Competitive Analysis

Industry/Market Analysis

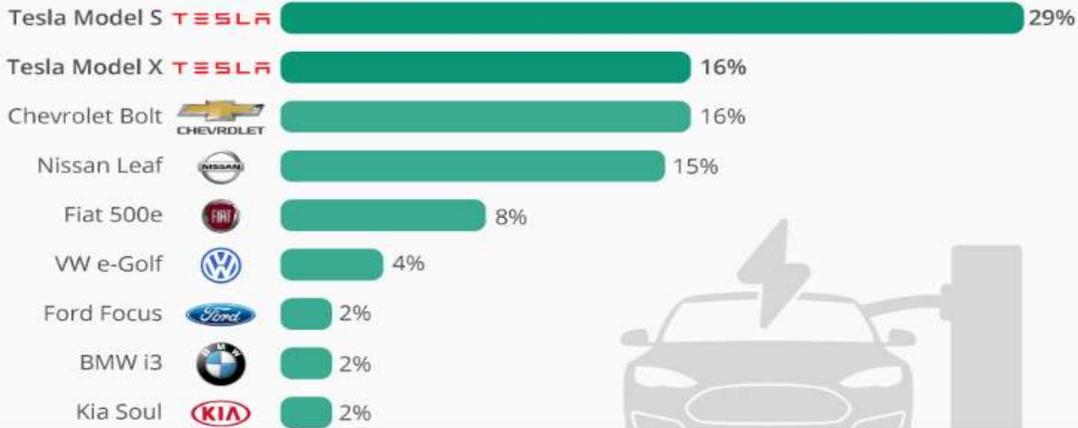
Market Size

Tesla continues to dominate the United States electric vehicle market.⁴²

⁴² McCarthy, N. (2018). *Tesla dominates the U.S. electric vehicle market*. Retrieved from: <https://www.statista.com/chart/10684/tesla-dominates-the-us-electric-vehicle-market/>

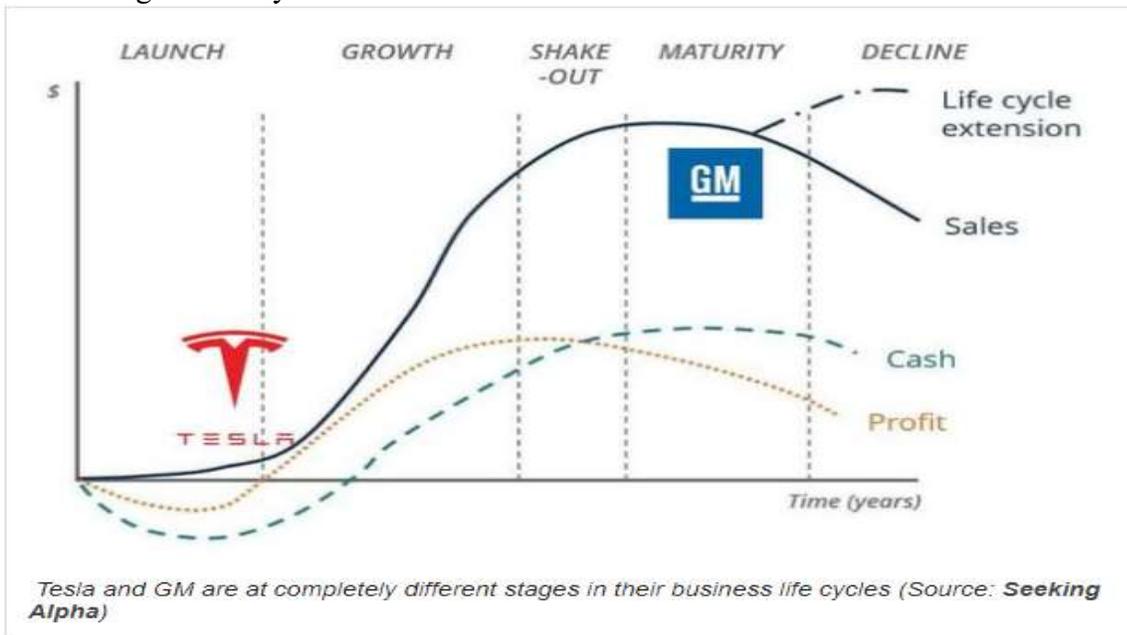
Tesla Dominates The U.S. Electric Vehicle Market

U.S. electric vehicle sales share (based on unit sales between January & June 2017)



Stage of Life Cycle

Tesla's stage of life cycle.⁴³



Growth Rate

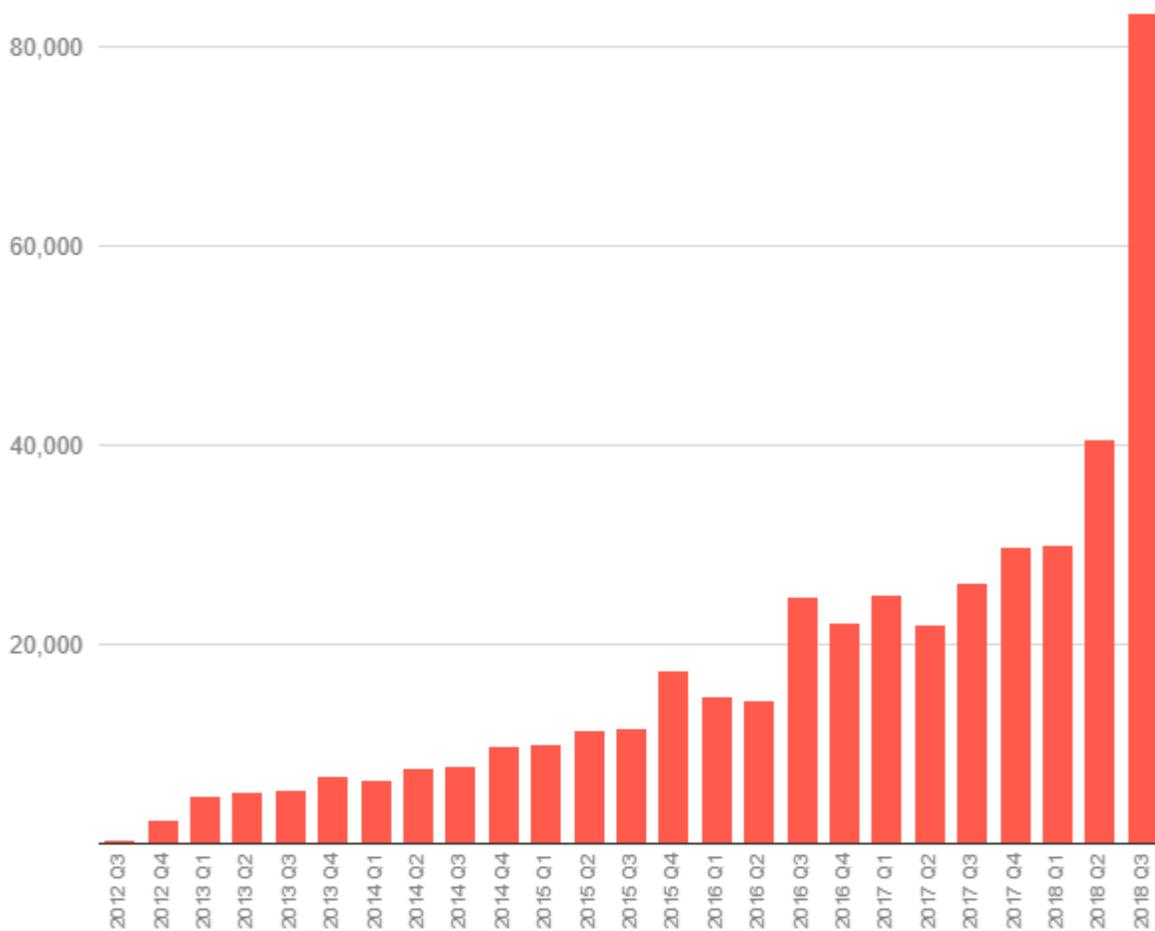
Tesla, Inc. delivered stunning growth results at the close of Q3 2018. Within just six years Tesla has delivered 25,913% sales growth.⁴⁴ The luxury car market is competitive within the United

⁴³ Pressman, M. (2018). *Big auto has a problem: Evolve too slowly or cannibalize cash cows*. Retrieved from <https://cleantechnica.com/2018/11/08/big-auto-has-a-problem-evolve-too-slowly-or-cannibalize-cash-cows/>

⁴⁴ Shahan, Z. (2018). *25,913% Growth in Tesla sales in 6 years*. Retrieved from <https://cleantechnica.com/2018/10/04/25913-growth-in-tesla-sales-in-6-years/>

States, however, Tesla, the zero-emissions electric vehicle giant, broke its quarterly delivery record by more than double in the third quarter of 2018.

Tesla Quarterly Deliveries



Source: [Tesla](#) | [CleanTechnica](#) • [Get the data](#) • Created with [Datawrapper](#)

Scope of Rivalry

For a long-time Tesla has enjoyed success in the electric automobile industry, since it has existed with tax subsidies and little to no competition.⁴⁵

The scope of Tesla's competition and rivalry has been a hot topic and subject of debate, as of 2018's Q3. In September of 2018, according to analysts at Bernstein, "Tesla Inc. faces no competition at present, and when it does it will be able to hold its own".⁴⁶ While competitors

⁴⁵ Crain, K. (2018). *What we'll learn as Tesla faces real competition*. Retrieved from: <http://www.autonews.com/article/20180924/OEM01/180929944/tesla-musk-competition-luxury-keith-crain>

⁴⁶ Assis, C. (2018). *Tesla has no credible competition, analyst says*. Retrieved from: <https://www.marketwatch.com/amp/story/guid/EA5ACC7A-BA8D-11E8-A67E-5AD473BD3B51>

have attempted to create a viable electric vehicle, competitors have yet to design an alternative that is as futuristic, with a performance that is comparable to a gasoline powered car.

Additionally, Tesla stands alone with an impressive 2,000 charging stations across the globe.

Rivalry Concentration

Competitors of Tesla have attempted to create an electric car that can compete with Tesla, however Tesla has been unmatched with offering its proprietary lithium-ion batteries with a range of more than 200 miles per charge. Tesla continues to give its hopeful competitors a run for their money, with offering an impressive 2,000 charging stations across the globe.

Product/Service Differentiation

The Tesla Model 3 product and service differentiation compared to the competition.⁴⁷

| THE TESLA MODEL 3 COMPARED TO THE COMPETITION | | | | | | |
|--|----------|---------------|------------|-----------------|-------------------------|--|
| CAR | COST | RANGE (MILES) | HORSEPOWER | TOP SPEED (MPH) | ACCELERATION (0-60 MPH) | |
|  Ford Focus Electric | \$29,120 | 100 | 143 | 85* | 9.9 sec.* | |
|  Hyundai Ioniq** | \$29,500 | 124 | 118 | 90* | 8 sec.* | |
|  Volkswagen e-Golf | \$28,995 | 126 | 134 | 85* | 9.3 sec.* | |
|  Nissan Leaf S | \$30,680 | 107 | 107 | 100 | 10.2 sec. | |
|  Kia Soul EV | \$32,350 | 93 | 109 | 90 | 9.2 sec. | |
|  Chevy Bolt | \$37,495 | 238 | 200 | 91 | 6.5 sec. | |
|  Tesla Model 3 | \$35,000 | 220 | N/A | 130 | 5.6 sec. | |

NOTE: Owners eligible for up to \$7,500 in federal tax savings *Car/Driver estimates **Only available in California BUSINESS INSIDER

Economy of Scale

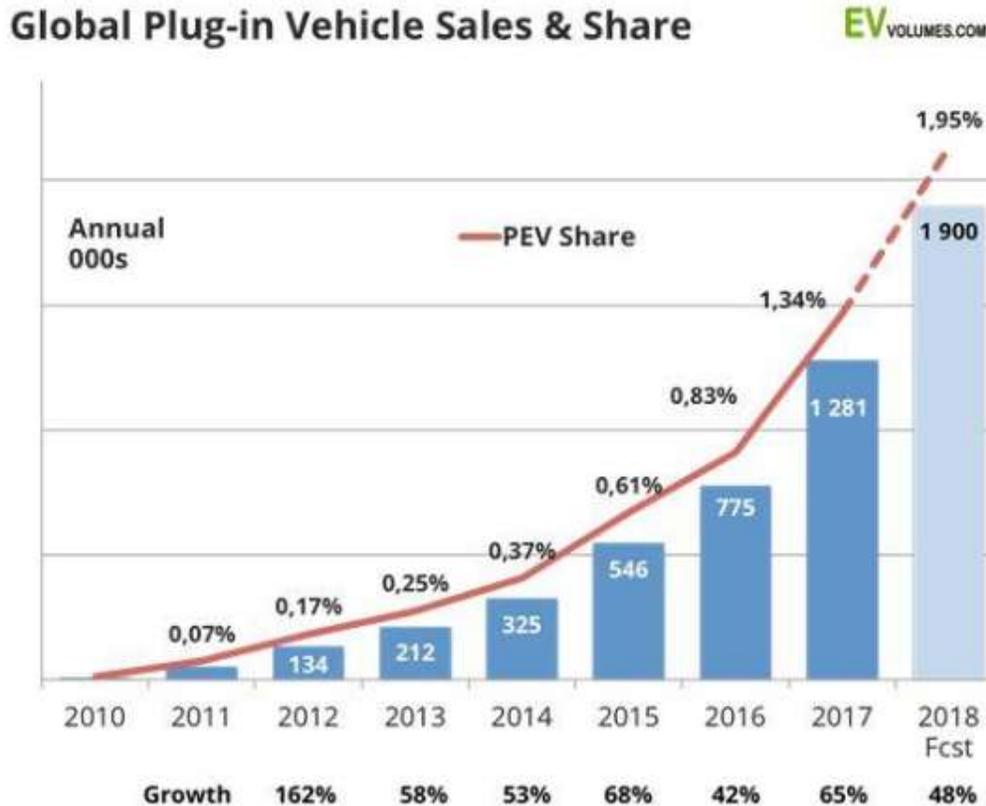
Tesla’s plan is to “create a low volume car, which would necessarily be expensive, use that money to develop a medium volume car at a lower price” and, “use that money to create an

⁴⁷ Business Insider. (2018). *The Tesla Model 3 compared to the competition*. Retrieved from: <https://amp.businessinsider.com/images/598388c476084a6b008b52f1-750-595.png>

affordable, high volume car.”⁴⁸ While Tesla’s financials do not look good and they have continued to dodge debt, investors look for the possibility of financial solvency.

Tesla continues to press forward with building economies of scale, requiring large amounts of upfront capital investments and R&D. The goal of Tesla is to eventually build the capacity to manufacture millions of electric vehicles every year, and to automate that process through sophisticated robotics.

It is important to note that, “a recent survey by AAA found that 20% of Americans reported their next car will be an EV, up from 15% a year ago.”⁴⁹



Barriers to Entry

The electric automobile industry has been dominated for years by Tesla, however at the close of Q3 2018, competition is picking up with the threat of new entrants to the electric vehicle industry.

Porter’s Five Forces

Buyers

⁴⁸ Giaquinto, J. (2018). *Tesla: A classic case of building economies of scale to achieve profitability*. Retrieved from <https://www.nasdaq.com/article/tesla-a-classic-case-of-building-economies-of-scale-to-achieve-profitability-cm965367>

⁴⁹ Assis, C. (2018). *Tesla has no credible competition, analyst says*. Retrieved from: <https://www.marketwatch.com/amp/story/guid/EA5ACC7A-BA8D-11E8-A67E-5AD473BD3B51>

The power of the buyers in this industry is moderate. This is due to the partnerships Tesla has created. Other factors provides for a moderate buying power are directly selling to consumers and government tax deduction programs for consumers buying EV's.⁵⁰

Suppliers

Bargaining power of suppliers in this industry is very high. Tesla relies heavily on over 200 suppliers all over the world.⁵¹

Current Rivals

The number of firms considered rivals in the electric vehicle industry are very low but they operate very competitively and aggressively. Tesla has positioned themselves in the market to reduce the rivalry, overall, and be more moderate. As the market grows and becomes more attractive, companies will find more ways to be competitive and the rivalry will continue to rise.

Substitute Products

There are not many substitutes in the automotive car industry, therefore, the threat is very low. The closest product to substitution might be cycling or walking, but this is not desirable for long distance traveling. Other substitutions may include mass transportation, such as trains, buses, and subways.

Threat of New Entrants

There is a small number of auto companies that have their own niche. Companies that have the potential to enter the market are partnering with Tesla, so there is no threat.

Forces of Change

One of the major forces of change that could negatively affect Tesla's success, is its openness to sharing its technology and ideas. They have put all the R&D into developing efficient products where other companies can easily imitate its technologies, without having to pay for any of the R&D.

Another force that could have positive effects on Tesla's success, is the noticeable differences in climate to where countries want to speed up its initiatives to implement cleaner energy. Tesla already has the infrastructure and potential capacity to begin mass producing its products. If the demand was there and they were under extreme pressures to produce and deliver, I believe they would pull through.

Key Success/Survival Factors

Tesla's key success factor is that they have positioned themselves perfectly in the marketplace through partnerships, innovation, diversification, and ability to mass produce products, so that they are not likely to fail even with the biggest hit to the economy. Due to Tesla's diversification

⁵⁰ Business. (July 2017). *Tesla Motors – External analysis using PESTLE – The SpherePress*. The Spherepress. Retrieved from <http://thespherepress.com/tesla-motors-external-analysis-pestle/>

⁵¹ Business. (July 2017). *Tesla Motors – External analysis using PESTLE – The SpherePress*. The Spherepress. Retrieved from <http://thespherepress.com/tesla-motors-external-analysis-pestle/>

in products, being able to sell in multiple markets on a global scale, creates a safety net if any one of its products does not do well in a particular location or market.

Even though there is a potential threat from other company's ability to imitate Tesla's technologies, Tesla still has an advantage over any potential competitor in its ability to mass produce batteries and sell them in the EV industry or in the energy industry. Tesla's technology team has developed the most efficient battery, far surpassing any other company's batteries. Any company that wants to compete will have to purchase Tesla batteries, or spend more money on R&D. However, this is unlikely because it would be difficult for another company to produce the same capacity as Tesla's Gigafactories.

Industry Attractiveness

The automated car industry is becoming increasingly attractive along with the alternative energy industry. As the world moves towards adopting more sustainable energy practices, this is the perfect time to be the lead company in the industry. With all that Tesla has developed and implemented as far as infrastructure, they have no intentions of backing out any time soon or else they would lose billions of dollars and upset lots of heavy investors. Tesla is determined to help pave the way for the transformation into using alternative energy, that they have already implemented most of the infrastructures needed to begin making the vision a reality. With the biggest manufacturing facility in the world ready to mass produce batteries and the majority of the population in the United States no farther than 5 miles from the nearest charging station, people will begin to see that the attainability of the new system and will begin to adopt it with open arms.

Strategic Synthesis – Industry/Market Analysis

The strategic implications of the above analysis are that Tesla does not have much of a threat of competitive pressure. There only risk is its reliance on Tesla's suppliers since the supplies they need are unique to its industry. This makes them vulnerable if there are any issues with delivery or sudden halt in production from the suppliers, but it looks as if they are reducing risks of this dependence by having multiple suppliers in case one fails to deliver.⁵²

The significant trends, opportunities, and threats that stand out in this analysis evolve around the demand for alternative energy solutions around the globe. Trends of alternative energy use are increasing all over world and opportunities are arising especially in developing countries where they are looking to implement energy systems. The threats there lie in economic instability, resistance to accepted alternative energy systems, or the inability for Tesla to reach economies of scale that make its systems affordable to the majority of consumers.

Ultimately, an increasing number of countries around the world are creating incentives for investing in alternative energy. The Paris Agreement, for example, was signed by over 200 countries to begin switching over to renewable energy. Countries continue to set ambitious goals

⁵² Business. (July 2017). *Tesla Motors – External analysis using PESTLE – The SpherePress*. The Spherepress. Retrieved from <http://thespherepress.com/tesla-motors-external-analysis-pestle/>

and support them with investments so that they are implemented faster. The world is embracing renewable energy to fight back against climate change, so there will be no end to the rising demand clean transportation, energy storage, micro-grids and solar energy systems that are being offered by Tesla, any time soon.

Competitive Environment

Direct Competitors

As an auto manufacturer, Tesla has many competitors. Some of Tesla's major competitors are Ford, General Motors (GM), Honda Motor Company, Hyundai, Nissan, Kia, Volkswagen, Chevy, and Toyota Motor.⁵³ All of these companies have options for electric vehicles and crossovers. With a focus on clean transport and energy, more of these companies are introducing their own version of a more environmentally friendly vehicle.

Direct Competitors' Current Strategies

The competitors' current strategies seems to focus on the development of the ideal battery for the perfect all-electric vehicle. Tesla has a definite advantage with its significant development in the battery. However, in order to compete, competitors are trying to develop a battery that can compete with Tesla. Chevy has shown that they are able to match or surpass the distance that can be traveled on one charge, but is still lagging in acceleration and top speed.

Along with developing the perfect battery, competitors will focus on providing charging solutions for those batteries, as well. This will make the vehicles more appealing and increase demand for products.

Direct Competitors' Capabilities

With big name competitors, such as Ford and GM, there is potential for significant advances in the development of vehicles that are worthy to compete with the Tesla models. These competitors have been around for decades and have a strong foothold in the automobile industry. They are capable of conducting the research and developing vehicles and charging solutions to attract consumers. Although the big manufacturers only seem to focus on a few models, Tesla would be wise to strive to remain on top of the electric vehicle market, here in the United States. If the United States began to provide strong incentives, like the Chinese government, Tesla may find that these big auto manufacturers truly are strong competitors.

Direct Competitors' Future Objectives/Assumptions

Future objective of the competitors consist of utilizing their capabilities to develop electric vehicles that offer consumers the clean energy efficient vehicles they desire. In order to make electric vehicles more attractive and desirable, it will be necessary for competitors to build charging stations, similar to Tesla.

Strategic Synthesis – Competitive Environment

Although other auto manufacturers also offer a clean transport alternative, Tesla's vehicles are unique in technology and performance. Tesla vehicles can travel longer distances and have greater power and acceleration than most of its counterparts. One thing that sets Tesla apart

⁵³ Bhasin, H. (June 14, 2018). *Tesla competitors*. Retrieved from <https://www.marketing91.com/tesla-competitors/>

from its competitors is that Tesla only produces an all-electric vehicle. Other manufacturers produce mainly gasoline-powered vehicles and have a few electric vehicle models to offer the consumer. This makes Tesla a leader in the industry when it comes to all-electric vehicles.

Even though Tesla seems to have a leg up, it would still be wise to keep an eye on the competitors. With the increasing call for greener, more sustainable transport and energy solutions, other auto manufacturers will most likely begin to answer that call and provide real competition for Tesla.

Strategic Synthesis – Overall External Assessment

Although there are many external factors that could affect Tesla's success, Tesla has a pretty strong position in the electric vehicle market. With continued innovation and attention to research, Tesla can continue to lead the market in innovation and technology. Although there are not many competitors for Tesla in the U.S. market, the possibility for more competition is very real. With an overall trend to purchase cleaner options for transportation, electric vehicles will become more and more popular with consumers. When the popularity increases, so will the demand and competing automotive companies will begin to put more focus on electric vehicles.

Tesla is well equipped to stay ahead of the game, but must remain aware of the outside external factors that can greatly affect its success.

SWOTT Analysis

A SWOTT analysis is used to evaluate a company's competitive position.⁵⁴ This analysis utilizes the internal and external assessment in order to identify the company's strengths, weaknesses, opportunities, threats, and trends. It is very useful for helping a firm identify opportunities to succeed and provides information about possible threats, so that a company can take appropriate action.

Strengths

- Life cycle extension
- Dominates U.S. EV market
- Sales growth – 25,913% in 6 years; Doubled from 2nd to 3rd quarter in 2018
- Only company with 2000 charging stations across the globe
- Sells directly to consumers
- Diversification in products and markets
- Innovative capabilities/technological advances

Weaknesses

- High bargaining power of suppliers
- Refusal to patent technology

⁵⁴ *SWOT Analysis*. (2018). In *Investopedia*. Retrieved from <https://www.investopedia.com/terms/s/swot.asp>

- Meeting production goals
- High costs – powerwall market is still unaffordable compared to U.S. electricity costs
- Time it takes to charge a battery

Opportunities

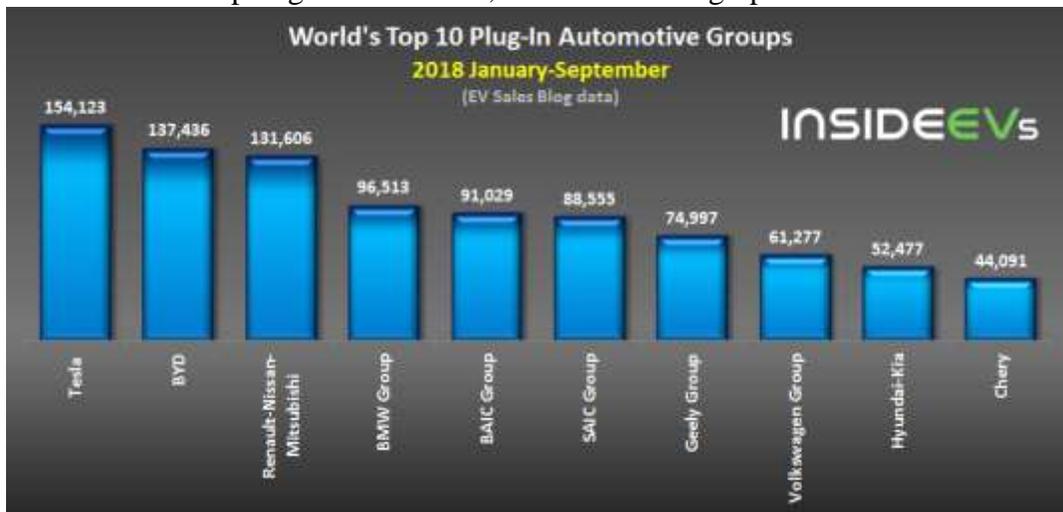
- Little to no rivalry
- Survey that 20% of Americans want their next car to be an EV; Up from 15% last year
- Countries initiatives to implement cleaner energy
- China – grown to be 2nd largest economy in the world
- Countries without mature energy infrastructures
- Targeting businesses and utility companies with energy storage units
- Expansion of international patent protection
- Expansion of free trade agreements

Threats

- Potential competitors ability to imitate technology
- Economic instability
- Regulations, laws, or tariffs that delay production and inhibit ability to sell direct or ability to sell at an affordable price
- Enough skilled workers for the Gigafactories
- Limited supply of Lithium

Trends

- Increased demand for alternative energy solutions
- Metropolitan areas are more likely to purchase EV's
- Chinese market expanded by 72% over last year, larger than U.S. & Europe combined
- Ranked top in global EV sales, as shown in the graph below.⁵⁵



⁵⁵ Kane, M. (October 2018). *Tesla is now #1 even in the automotive group rankings*. Inside EV's. Retrieved from <https://insideevs.com/plug-in-electric-car-sales-ranked-oem/>

Situational Analysis

Tesla's current strategy continues to follow its three-prong approach: direct sales, servicing, and supercharging networks. Part of its strategy has been how it introduces the EV models into the market. Tesla started with producing a few of the Model X vehicles, its most expensive model, with the intent of getting the public familiar with the Tesla name and brand. At the same time, Tesla used those sales to support the manufacturing of its next model vehicle, which Tesla made a little more affordable and produced slight more in quantity. This model was known as the Model S. Now, the third model, the Model 3, is on the market, which is the most affordable model, yet, and has produced the highest quantities, thus far. With the Model 3 production and sales continuing to grow, Tesla's plan for 2019 is to produce 5000 vehicles per week to reach the goal of over 200,000 vehicles produced in 2019 and even doubling that by 2020.⁵⁶

In order to continue to increase vehicle production, Tesla has built the Gigafactory to produce parts to assemble the vehicles on a massive scale. Tesla knows that in order to reduce manufacturing costs in the long run, it needs to ultimately develop the "machine that builds the machine".⁵⁷ Tesla's ability to develop technology has kept it at the forefront of the energy solution and EV industry; and will remain there so long as Tesla continues to cut costs through technology and mass production.

Tesla's SWOTT analysis reveals that it holds a strong position moving into the future with its strengths and opportunities far outweigh its weaknesses and threats. The few weaknesses and threats it does have are either highly unlikely or, now, have solutions to help eliminate any potential issues. Tesla has done a phenomenal job in recreating its current strategy to be in synch with the analysis. It is well rounded as it balances out utilizing Tesla's strengths and opportunities while at the same time, addresses how to strengthen against weaknesses and protect against potential threats.

The strengths for Tesla weigh heavily on its technological capabilities and innovations. Tesla plans to be the sustainable energy powerhouse and have plans for the development of an EV semi, pickup truck, ultra-low cost models, mass transit, and a complete self-dependent ecosystem of products.⁵⁸ It continues to develop longer-lasting, energy dense batteries that far surpass what any competition has developed.

The opportunities available in the Chinese market and its ability to build multiple gigafactories, will put Tesla at an advantage that will be hard to compete with. Right now, Tesla owns 81% of the market EV's imported into China. Even though that is a fraction of the total market in China (since they have the largest auto market in the world), this will change dramatically once Tesla

⁵⁶ Krok, A. (October 2018) *Tesla's fabled \$35,000 model 3 on target for first half of 2019*. Road Show. Retrieved from <https://www.cnet.com/roadshow/news/tesla-short-range-model-3-on-target-2019/>

⁵⁷ Deshardins, J. (April 2018). *Visualizing Elon Musk's vision for the future of Tesla*. Visual Capitalist. Retrieved from <https://www.visualcapitalist.com/elon-musks-vision-future-of-tesla/>

⁵⁸ Deshardins, J. (April 2018). *Visualizing Elon Musk's vision for the future of Tesla*. Visual Capitalist. Retrieved from <https://www.visualcapitalist.com/elon-musks-vision-future-of-tesla/>

builds a gigafactory in China. This will bypass the import tariffs that could be effecting current sales of exported EV's to China.

Other strengths and opportunities for Tesla include its diversification of products, which includes alternative energy products, such as solar roof products and powerwalls. The demand for alternative energy solutions continues to rise around the world, along with incentives provided by governments to encourage people to adopt these systems. Tesla is preparing to increase its capacity to supply demand as it arises and Tesla's ability to mass produce will help make it more affordable, increasing demand even more.

In conclusion, Tesla keeps its strategy focused on the fastest way to get these sustainable systems implemented into society and, overall, has successfully been able to juggle the multiple tasks required to do so. Tesla's ability to address issues as they arise is impressive and has balanced out the diversity of the company and provided for growth in every direction. From technology innovations, to cutting costs, building infrastructures, to meeting production goals, Tesla is still going strong and continues to lay the foundation for a more sustainable future in using alternative energy. No other company has anywhere near the capabilities to do a fraction of what Tesla has done and are able to do. With hardly any obstacles in its way, Tesla just needs to continue developing innovative technologies; taking advantage of opportunities as they present, especially in countries where demand for energy solutions are greatest; and continue making its manufacturing process more efficient through technology advances.

General Problem Statement

Tesla, Inc. has been successful as an innovative automotive and energy solutions business. Despite Tesla's 2018, 3rd quarter success, long-term challenges remain for expanding the business and maintaining financial stability. In general, Tesla has struggled with consistently producing what they claim and project. Tesla's financial instability and inability to reduce production costs prior to Q3 of 2018, has been an ongoing thorn in its side.

Despite Tesla's strong brand as a leader in electric vehicles, Tesla's performance and potential future growth suffer from a limited supply chain, high prices, financial instability, and inability to produce a profit. Also, Tesla has also struggled to consistently produce what it claims to be able to produce.

Another area in which Tesla could improve would be to increase its limited market presence. Tesla has generated much of its revenue within the United States, but has only had a small presence in China and the developing world.

Strategic Alternatives

Mass Production – Reduced Costs

Tesla's products are competitive because it integrates advanced environmentally friendly technology into quality vehicles, considering that the vast majority of automobiles today use internal combustion engines. Initially, Tesla used differentiation focus as its generic strategy for competitive advantage. In applying the differentiation focus strategy, the company emphasized

the uniqueness of its products, but focused mainly on early adopters in high-end markets for electric automobiles.

Now that the company is more established in its brand and the production costs are beginning to decline, the company is able to target customers in the automobile market more broadly. Technology and innovation are hallmarks of Tesla. Tesla can market its clean energy solutions created by the Gigafactory and SolarCity to consumers that are increasingly demanding new clean alternatives to energy that are cost efficient and environment friendly. The company currently manufactures larger battery packs than that of its competitors, 75 to 100 kWh.⁵⁹ If Tesla was able to take its innovative and technological strengths and mass produce these batteries, the overall production costs would be reduced, ultimately improving the financial standing of the company.

Expand Branding and Marketing

As energy solutions become more widely accepted and popular, Tesla's products become more appealing. Tesla calls its business model the three-pronged approach: direct sales, servicing, and supercharger network. In the past, Tesla has shown a decided lack of marketing, priding itself on a \$0 marketing budget. However, it is our intent to spend a little money on marketing in order to make a better profit for the company. Although Tesla is not unheard of, it is still a mystery to some. When people think of Tesla, they think of high priced, luxury electric vehicles. This is not a bad thing, but many people do not know that Tesla has come out with a more affordable option in the Model 3. This model can appeal to many of the people that may automatically hear the name "Tesla" and dismiss it because they think it is above their price range.

Many people are also unaware of Tesla's advancements in the clean energy generation and storage field. A little bit of strategic marketing could make people more aware of everything Tesla has to offer. Tesla could emphasize that, although there is an initial cost for the consumer, there are also numerous grants and even tax credits for going green. This could help potential consumers realize the benefits in upgrading to clean energy.

China – Global Market Expansion

Tesla's brand and innovative nature support international growth despite competitive pressure from other automakers. As a popular manufacturer of electric automobiles, Tesla would gain from global expansion, specifically in the Chinese market. China has grown to become the second largest economy in the world. Expansion into foreign markets would increase the company's revenues and overall stability. It is important to note that Tesla would need to address and maintain international competitiveness along with corresponding business growth.

Since Tesla is known as a strong symbol of innovation and renewable energy solution, its brand has the ability to attract and retain new customers. Global sales expansion and the global supply

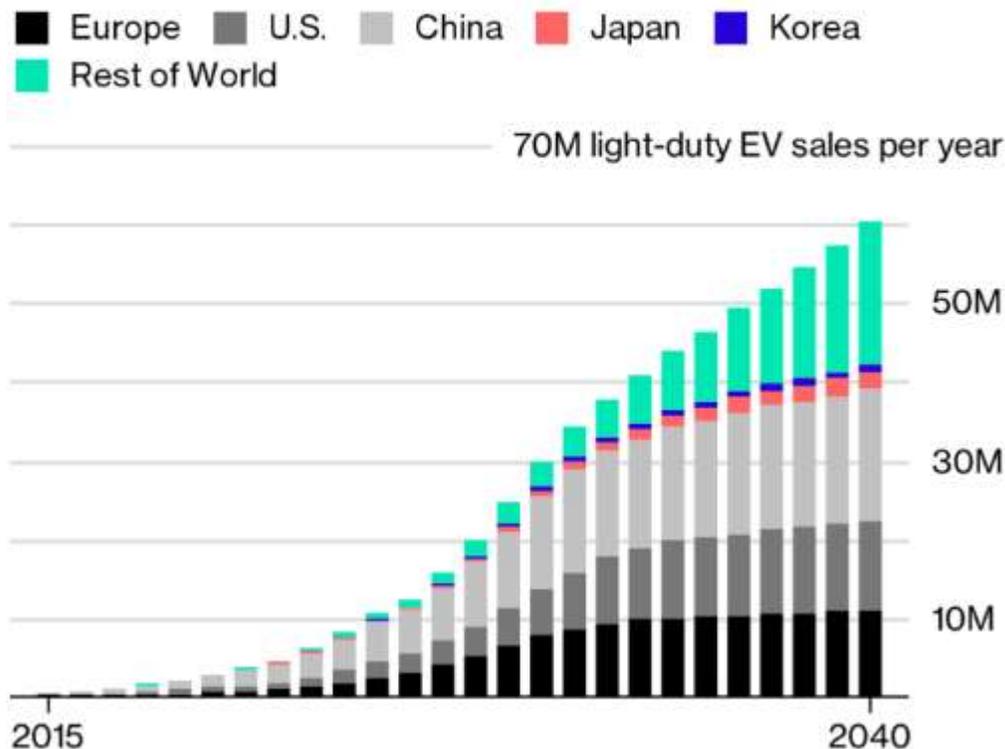
⁵⁹ Lambert, F. (2018). *Tesla confirms Gigafactory 1 battery production at '~20 GWh' – more than all other carmakers combined*. Retrieved from <https://electrek.co/2018/08/02/tesla-gigafactory-1-battery-production-20-gwh/>

chain expansion into the Chinese market presents a solid strategic alternative for Tesla. Expanding operations in foreign markets to exploit the global growth of the renewable energy industry and diversifying the supply chain to reduce supply-side risks are all strong alternative strategic solutions.

As of early December 2018, Tesla has announced plans to begin production in China as early as the second half of 2019.⁶⁰ According to Elon Musk, Tesla’s CEO, the company plans to start production of its Model 3 vehicle in China next year and has already begun the hiring process to staff the new facility.

In the Fast Lane

China is set to lead in the global electric-vehicle revolution



Source: Bloomberg New Energy Finance

Bloomberg

Strategic Recommendations

Mass Production

⁶⁰ Jin, J., Heiskanen, V., & Hull, D. (2018). *Tesla advances China push with 2019 Shanghai production goal*. Retrieved from <https://www.bloomberg.com/amp/news/articles/2018-12-06/tesla-to-start-production-in-china-next-year-shanghai-says>

Although electric vehicles was not a completely new concept, Tesla brought a new technology and innovative approach to the electric vehicle market in the U.S. Tesla's dedication to providing the consumer with alternative sustainable solutions for cleaner transport and energy generation and storage has truly been revolutionary.

Since the technology Tesla developed was brand new, costs to manufacture the initial Tesla vehicle were considerable. Even though Tesla launched the vehicle as a luxury model with a high price tag, Tesla was consistently losing money in the early phases. Tesla has had a difficult time with sustaining a net profit, but, as reported, this years (specifically Q3) are looking much more lucrative for Tesla.

Tesla has many opportunities to increase sales and profits. Our first recommendation is that Tesla refine manufacturing processes so that it is able to mass produce, in an efficient manner, at lower costs. The demand for electric vehicles has increased significantly. In fact, a recent survey reflects that consumer demand for EVs is up by 20%, an increase from 15% in the previous year.⁶¹ With this increase in demand, Tesla can capitalize on this opportunity if it is able to produce enough vehicles to meet rising demand.

In fact a possible solution for Tesla could be to build more Gigafactories to help meet the demand. Tesla's goal is to be able to churn out 5000 vehicles per week in 2019.⁶² A new Gigafactory strategically placed to help supply the parts necessary for the completion of this task could be beneficial to Tesla. Tesla's battery pack is also a hot commodity that is produced at the Gigafactory. The battery is larger and more powerful than the current competitors and, if Tesla can mass produce them, they could provide a good revenue stream for Tesla.

Branding and Marketing

Although the Tesla name is becoming more familiar, it is consistently equated with the electric vehicle market. This is not a bad thing, but the brand can be improved upon. We would like to see the Tesla name equated to its mission, to accelerate the world's transition to sustainable energy. Tesla is no longer only in the EV market, Tesla also supplies alternative sustainable energy options for generation and storage. Tesla is also heavily involved in the solar energy market. Tesla produces solar tiles and its powerwalls, not to mention batteries that are capable of storing solar energy.

Although Tesla prides itself on its low (\$0) marketing budget, our recommendation is to fund marketing projects that will help expand the Tesla brand into the energy generation and storage side, instead of solely in the EV area. Since government subsidies, incentives, and tax credits exist for the use of alternative energy sources, this would be a good opportunity for Tesla to make consumers aware of the possibilities.

⁶¹ Assis, C. (2018). *Tesla has no credible competition, analyst says*. Retrieved from: <https://www.marketwatch.com/amp/story/guid/EA5ACC7A-BA8D-11E8-A67E-5AD473BD3B51>

⁶² Krok, A. (October 2018) *Tesla's fabled \$35,000 model 3 on target for first half of 2019*. Road Show. Retrieved from <https://www.cnet.com/roadshow/news/tesla-short-range-model-3-on-target-2019/>

A marketing campaign that will help the Tesla name and brand become more familiar in households across the world will increase Tesla's client base. Using the already existing incentives to promote Tesla's alternative energy storage and generation area of the business, might be key in generating more business for Tesla's energy solutions side.

Global Expansion

Tesla has the opportunity to expand its global network to generate more revenue and sales. Although we recommend that Tesla look to strategically expand worldwide, China is where we believe Tesla should focus.

The Chinese government offers good incentives for the purchase of EVs. Tesla already has some operations based in China and expanding these to include a Gigafactory would be beneficial to Tesla. Tesla would be able to take advantage of the incentives offered, while providing the Chinese market with quality vehicles. Since Tesla already supplies materials to Chinese EV manufacturers, the Tesla brand is already present in the market. The demand for electric vehicles in China is on the rise and Tesla would be able to better meet the demand with facilities in the country.

Our recommendation is for Tesla to take advantage of the global opportunities offered by expanding operations into China and other markets worldwide.

References

- Assis, C. (2018). *Tesla has no credible competition, analyst says*. Retrieved from: <https://www.marketwatch.com/amp/story/guid/EA5ACC7A-BA8D-11E8-A67E-5AD473BD3B51>
- Bhasin, H. (June 14, 2018). *Tesla competitors*. Retrieved from <https://www.marketing91.com/tesla-competitors/>
- Business. (July 2017). *Tesla Motors – External analysis using PESTLE – The SpherePress*. The Spherepress. Retrieved from <http://thespherepress.com/tesla-motors-external-analysis-pestle/>
- Business Insider. (2018). *The Tesla Model 3 compared to the competition*. Retrieved from: <https://amp.businessinsider.com/images/598388c476084a6b008b52f1-750-595.png>

- Crain, K. (2018). *What we'll learn as Tesla faces real competition*. Retrieved from: <http://www.autonews.com/article/20180924/OEM01/180929944/tesla-musk-competition-luxury-keith-crain>
- DeBord, M. (Jan 2018) *Tesla's Model 3 deliveries were awful – but the company still set a sales record for 2017*. Business Insider. Retrieved from <https://www.businessinsider.com/teslas-model-3-deliveries-awful-but-company-sales-record-for-2017-2018-1>
- Deshardins, J. (April 2018). *Visualizing Elon Musk's vision for the future of Tesla*. Visual Capitalist. Retrieved from <https://www.visualcapitalist.com/elon-musks-vision-future-of-tesla/>
- Fraser, L. M., & Ormiston, A. (2013). *Understanding financial statements* (10th Ed.). Upper Saddle River, NJ
- Gardner, G. (April 2016). *Tesla faces five big challenges*. USA Today. Retrieved from <https://www.usatoday.com/story/money/cars/2016/04/10/tesla-faces-five-big-challenges/82859740/>
- Giaquinto, J. (2018). *Tesla: A classic case of building economies of scale to achieve profitability*. Retrieved from <https://www.nasdaq.com/article/tesla-a-classic-case-of-building-economies-of-scale-to-achieve-profitability-cm965367>
- Gibson, R. (Sept 2017). *Which countries have the best incentives for EV purchases?*. Fleetcarma. Retrieved from <https://www.fleetcarma.com/countries-best-incentives-ev-purchases/>
- Gregersen, E. & Schreiber, B.A. (n.d.). *Tesla, Inc.* In *Encyclopedia Britannica online*. Retrieved from <https://www.britannica.com/topic/Tesla-Motors>
- Hertzke, P., Muller, N., Schenk, S., & Wu, T. (May 2018). *The global electric-vehicle market is amped up and on the rise*. Retrieved from <https://www.mckinsey.com/industries/automotive-and-assembly/our-insights/the-global-electric-vehicle-market-is-amped-up-and-on-the-rise>
- Jiang, E. (Nov 2018). *Tesla says report stating sales in China crashed 70% in October is “wildly inaccurate”*. Markets Insider. Retrieved from <https://markets.businessinsider.com/news/stocks/tesla-stock-price-china-sales-crash-trump-trade-war-bites-2018-11-1027759040>
- Jin, J., Heiskanen, V., & Hull, D. (2018). *Tesla advances China push with 2019 Shanghai production goal*. Retrieved from <https://www.bloomberg.com/amp/news/articles/2018-12-06/tesla-to-start-production-in-china-next-year-shanghai-says>

- Kane, M. (October 2018). *Tesla is now #1 even in the automotive group rankings*. Inside EV's. Retrieved from <https://insideevs.com/plug-in-electric-car-sales-ranked-oem/>
- Kissinger, D. (June 2018). *Tesla, Inc. PESTEL/PESTLE analysis & recommendations*. Panmore Institute. Retrieved from <http://panmore.com/tesla-motors-inc-pestel-pestle-analysis-recommendations>
- Krok, A. (October 2018). *Tesla's fabled \$35,000 model 3 on target for first half of 2019*. Road Show. Retrieved from <https://www.cnet.com/roadshow/news/tesla-short-range-model-3-on-target-2019/>
- Lambert, F. (Aug 2018). *Tesla confirms Gigafactory 1 battery production at 20 GWh –more than all other carmakers combined*. Electrek. Retrieved from <https://electrek.co/2018/08/02/tesla-gigafactory-1-battery-production-20-gwh/>
- McCarthy, N. (2018). *Tesla dominates the U.S. electric vehicle market*. Retrieved from: <https://www.statista.com/chart/10684/tesla-dominates-the-us-electric-vehicle-market/>
- McDonald, L. (July 2018). *Please stop saying “EVs are only 1% of auto sales in the US”*. Clean Technica. Retrieved from <https://cleantechnica.com/2018/07/01/please-stop-saying-evs-are-only-1-of-auto-sales-in-the-us/>
- McDonald, T. (2017). *Tesla stock: Capital structure analysis (TSLA)*. In *Investopedia*. Retrieved from <https://www.investopedia.com/articles/markets/052316/tesla-stock-capital-structure-analysis-tsla.asp>
- Melinda, V. (Jan 2017). *Tesla S/X/3 costs & demographic study*. 3 Model 3 Owners Club. Retrieved from <https://model3ownersclub.com/threads/tesla-s-x-3-costs-demographic-study.2429/>
- The Mission of Tesla. (2013). Retrieved from <https://www.tesla.com>
- Motyka, M., Slaughter, A., & Amon, C. (2018). *Global renewable energy trends: Solar and wind move from mainstream to preferred*. Retrieved from <https://www2.deloitte.com/insights/us/en/industry/power-and-utilities/global-renewable-energy-trends>
- Niu, E. (Jan 2016). *2 Important long-term opportunities for Tesla Motors that have nothing to do with cars*. The Motley Fool. Retrieved from <https://www.fool.com/investing/general/2016/01/24/2-important-long-term-opportunities-for-tesla-moto.aspx>
- Pressman, M. (2018). *Big auto has a problem: Evolve too slowly or cannibalize cash cows*. Retrieved from <https://cleantechnica.com/2018/11/08/big-auto-has-a-problem-evolve-too-slowly-or-cannibalize-cash-cows>

- Shahan, Z. (2018). *25,913% Growth in Tesla sales in 6 years*. Retrieved from <https://cleantechnica.com/2018/10/04/25913-growth-in-tesla-sales-in-6-years/>
- SWOT Analysis*. (2018). In *Investopedia*. Retrieved from <https://www.investopedia.com/terms/s/swot.asp>
- Tesla 2017 10K Report. (2018). Retrieved from <https://www.tesla.com>
- Tesla, Inc. (2013). *Annual report on form 10-K*. Retrieved from <http://ir.tesla.com/sec-filings/sec-filing/10-k/0001564590-15-001031>
- Tesla, Inc. (2014). *Annual report on form 10-K*. Retrieved from <http://ir.tesla.com/sec-filings/sec-filing/10-k/0001564590-15-001031>
- Tesla, Inc. (2015). *Annual report on form 10-K*. Retrieved from <http://ir.tesla.com/sec-filings/sec-filing/10-k/0001564590-16-013195>
- Tesla, Inc. (2016). *Annual report on form 10-K*. Retrieved from <http://ir.tesla.com/static-files/005f750d-f936-44cf-9721-9a89e4c466da>
- Tesla, Inc. (2017). *Annual report on form 10-K*. Retrieved from <http://ir.tesla.com/sec-filings/sec-filing/10-k/0001564590-18-002956>
- Tesla, Inc. (2018). *Tesla third quarter 2018 update*. Retrieved from <http://ir.tesla.com/static-files/725970e6-eda5-47ab-96e1-422d4045f799>
- Tesla, Inc. – TSLA Company Financials. (2018). Retrieved from <https://www.nasdaq.com/symbol/tsla/financials?query=income-statement>
- Tesla News. (2018). Retrieved from <https://www.tesla.com>
- Thompson, C. (2017). *How Tesla emerged from the brink of bankruptcy to become America's coolest car company*. Retrieved from https://www.businessinsider.com/most-important-moments-tesla-history-2017-2?utm_source=email&utm_medium=referral&utm_content=topbar&utm_term=desktop&pt=385758&ct=Sailthru_BI_Newsletters&mt=8&utm_campaign=email_article
- Zucchi, K. (October 27, 2018). *What makes Tesla's business model different?* In *Investopedia*. Retrieved from <https://www.investopedia.com/articles/active-trading/072115/what-makes-teslas-business-model-different.asp>