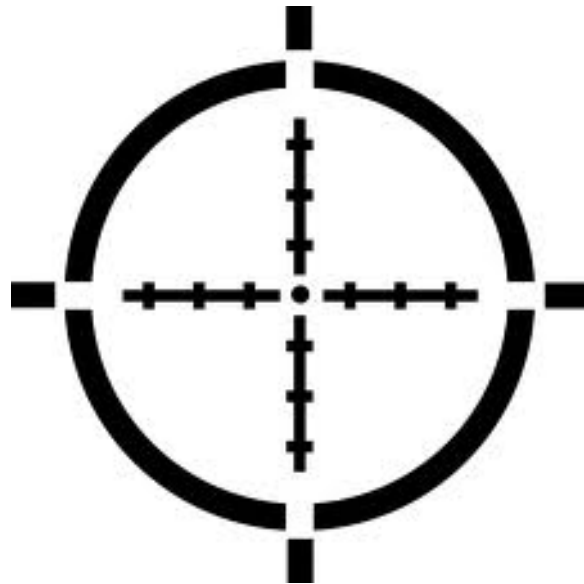


Tesla Corporation

Client Report

DangerZone Consulting



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Executive Summary

Tesla Motors, Inc. is an American company that designs, manufactures, and sells electric cars and electric vehicle powertrain components. Tesla Motors is a public company that trades on the NASDAQ stock exchange under the symbol TSLA. Tesla's stock has risen substantially in recent times; in 2014 TSLA stock has climbed nearly 70%, and in the past 12 months it is up an incredible 618%.¹

After 10 years, Tesla posted profits for the first time during the first quarter of 2013. Tesla Motors first gained widespread attention by producing the Tesla Roadster, the first fully electric sports car. The company's second vehicle was the Model S, a fully electric luxury sedan. The Roadster is the first production automobile to use lithium-ion battery cells and the first production electric vehicle with a range greater than 200 miles per charge. As of March 2013, Tesla employed almost 3,000 full-time employees and has 31 stores and counting worldwide. Each of these locations is a company store, which is a different sale-strategy than the norms of the U.S. vehicle marketplace. Car manufacturers usually sell their vehicles through dealerships.

Tesla also markets electric powertrain components, including lithium-ion battery packs, to automakers, including Daimler and Toyota. Tesla's CEO, Elon Musk, has said he envisions Tesla as an independent automaker, aimed at eventually offering electric cars at a price affordable to the average consumer.

Tesla entered the market place with an expensive, high-end product targeted at affluent buyers and plans to eventually move into more competitive markets at lower prices. The Roadster has a base price of \$109,000, and the Model S has a base price of \$69,000. The company plans to eventually launch a \$35,000 base price vehicle. Tesla is projecting sales of 40,000 electric vehicles worldwide in 2014.

¹ <http://moneymorning.com/2014/03/05/international-expansion-spark-tesla-nasdaq-tsla-stocks-next-great->

Tesla is focusing on moving from the upscale market portion of electric vehicles to the mass-market portion. In order to do this, it must figure out a solution to increase production capacity. Lithium-ion battery cells are currently the limiting factor in the production of electric vehicles. Tesla plans to build a Gigafactory, which by 2020 will have the capacity to build 500,000 lithium-ion battery cells, which is more than the current total world production. This factory will help Tesla diversify its main revenue sources. Not only will it have a large market share for electric vehicles, but it will also be the dominant producer of battery packs and powertrain components. Tesla must expand globally for demand to equal the production capacity the Gigafactory will create. Lastly, if Tesla, along with other electric vehicle manufacturers, can increase demand for the entire market it will remain profitable for the foreseeable future. Taking these actions will ensure that Tesla increases its market share and becomes the dominant force in electric vehicle manufacturing.

Company Background

Tesla Motors, Inc. was founded in Silicon Valley, California. Tesla Motors was incorporated in July 2003 by Martin Eberhard and Marc Tarpenning. Tesla Motors went public on June 29th, 2010, raising \$226 million. It is the first American car company to go public since Ford Motor Company in 1956. Elon Musk, the current CEO, conducted the Series A round of funding in February 2004, and subsequently joined Tesla's Board of Directors as its chairman. He also later led the Series B funding, raising another \$13 million. By February 2008, Tesla had undergone five rounds of financing, raising total investment in the firm to \$105 million. In addition, Tesla has also received massive government loans--\$465 million--from the United States Department of Energy. Other funding stems from equity investment by Daimler AG, the maker of Mercedes-Benz. On May 21, 2010, Tesla formed a strategic partnership with Toyota.

Tesla created the first electric sports car, the Tesla Roadster, in 2008. The Roadster had sales of around 2,500 vehicles in 31 countries. On June 22, 2013, Tesla began selling the four-door, Model S luxury sedan.

In addition to designing and manufacturing their own vehicles, Tesla also markets electric powertrain systems, including lithium-ion battery packs. Daimler purchased Tesla's electric powertrain systems for the Smart EV and Mercedes A Class, and Toyota purchased them for the electric RAV4. Elon Musk intends to commercialize electric vehicles by making them affordable to the average consumer. He currently advocates selling electric vehicle powertrain components to other automakers so that they can produce electric vehicles at affordable prices without having to develop their battery solutions in house.

Financial Analysis

Recent Financial Moves

Tesla's financial position is a complex one due to its capital structure and the methods Tesla uses to raise funds. In May 2013, Tesla issued \$660 million 1.5% convertible senior notes, used primarily to retire its \$451 million outstanding debt from Department of Energy. The conversion price was approximately \$124 per share. In order to mitigate the potential dilutive effect of the convertible notes, Tesla entered into a call spread transaction whereby it bought options with a strike price of \$124 and sold stock warrants with strike price \$184. This way Tesla effectively increased the overall conversion price from \$124 to \$185 per share. By the end of fiscal year 2013, Tesla's stock price closed at \$150 on Dec 31, 2013, below the effective conversion price.

More recently, Tesla issued \$2 billion total worth of convertible notes to the market at the rate of 1.25% and 0.5%, respectively. The company intends to use the cash primarily for construction of the \$5 billion Gigafactory.

Tesla Financials Overview

2013 was a great year for Tesla. The electric vehicle company delivered over 22,450 Model S vehicles in the past year, a significant jump from 2012. Revenue grew almost four-fold from 2012 and Tesla achieved positive EBITDA for the first time since its inception. Due to economies of scale in production, Tesla's COGS as a percentage of sales dropped from 86% in 2012 to 72% in 2013. Tesla reduced its net loss to only \$74 million, making it only one step away from profitability.

Overall, over the past 5 years, Tesla achieved 78% compound annual growth rate (CAGR) in revenue and 117% in gross profit. We expect Tesla to continue its growth momentum as it ramps up production capacity by locking up more suppliers and constructing its Gigafactory.

	12/31/2013	12/31/2012	12/31/2011	12/31/2010	12/31/2009
USD in million except EPS	USD	USD	USD	USD	USD
Income Statement Key Items					
Net Sales or Revenues	2,013.5	413.3	204.2	116.7	111.9
Growth	387%	102%	75%	4%	659%
Cost of Goods Sold	1,451.2	354.4	125.7	75.4	95.5
% of Sales	72%	86%	62%	65%	85%
Gross Profit	456.3	30.1	61.6	30.7	9.5
Gross Margin	23%	7%	30%	26%	9%
Selling, General & Admin Expenses	517.5	424.4	313.1	177.6	61.4
% of Sales	14%	36%	51%	72%	38%
EBITDA	67.6	(367.0)	(237.0)	(142.5)	(46.2)
EBITDA Margin	3%	(89%)	(116%)	(122%)	(41%)
Operating EBITDA	44.8	(365.5)	(234.6)	(136.2)	(45.0)
Operating EBITDA Margin	2%	(88%)	(115%)	(117%)	(40%)
EBIT	(38.5)	(395.8)	(253.9)	(153.2)	(53.2)
EBIT Margin	(2%)	(96%)	(124%)	(131%)	(48%)
Operating EBIT	(61.3)	(394.3)	(251.5)	(146.8)	(51.9)
Operating EBIT Margin	(3%)	(95%)	(123%)	(126%)	(46%)
Pretax Income	(71.4)	(396.1)	(253.9)	(154.2)	(55.7)
Pretax Margin	(4%)	(96%)	(124%)	(132%)	(50%)
Net Income to Common Shareholders	(74.0)	(396.2)	(254.4)	(154.3)	(55.7)
Net Margin	(4%)	(96%)	(125%)	(132%)	(50%)
EPS	(0.6)	(3.7)	(2.5)	(3.0)	(0.6)

Income Statement Key Items

The truth is even better than it looks on the income statement. Despite negative net income, in 2013 Tesla made a positive \$258 million in operating cash flow. The discrepancy from operating cash flow and operating income is primarily the result of accounting for Tesla's Resale Value Guarantee Program. Beginning in April 2013, Tesla started offering a resale value guarantee to all customers who purchased a Model S in the US and financed their vehicle through one of its specified commercial banking partners. Under the program, Model S customers have the option of selling their vehicle back to Tesla during the period of 36 to 39 months after delivery for a pre-determined resale value. Tesla receives the full amount of cash for the sales price at delivery, but only recognizes and defers revenue on a straight-lines basis over the contractual term of the guarantee program. Similarly, Tesla capitalizes and depreciates the cost of the vehicles sold under the resale value guarantee program over the same time period.

	12/31/2013	12/31/2012	12/31/2011	12/31/2010	12/31/2009
USD in million	USD	USD	USD	USD	USD
Cash Flow Statement Key Items					
Net Income / Starting Line	(74.0)	(396.2)	(254.4)	(154.3)	(55.7)
Depreciation, Depletion & Amortization	106.1	28.8	16.9	10.6	6.9
Deferred Income Taxes & Investment Tax Credit	-	-	-	0.0	-
Funds From Operations	133.0	42.8	75.2	(11.2)	(37.5)
Net Cash Flow - Operating Activities	258.0	(266.1)	(128.0)	(127.8)	(80.8)
Capital Expenditures (Addition to Fixed Assets)	(264.2)	(239.2)	(184.2)	(105.4)	(11.9)
Increase In Investments	0.0	(15.0)	(65.0)	-	-
Decrease In Investments	0.0	40.0	40	-	-
Disposal of Fixed Assets	0.0	0.0	-	-	-
Net Cash Flow - Investing	(249.4)	(206.9)	(162.3)	(180.3)	(14.2)
Net Proceeds From Sale/Issue of Com & Opt	630.6	246.4	242	270.2	131.8
Com/Pfd Purchased	0.0	0.0	-	0.0	0.0
Long Term Borrowings	660.0	188.8	204.4	71.8	25.5
Reduction In Long Term Debt	(460.8)	(15.5)	-	0.3	0.3
Cash Dividends Paid - Total	0.0	0.0	-	0.0	-
Net Cash Flow - Financing	635.4	419.6	446	338.0	155.4
Net Increase in Cash	644.0	(53.4)	155.7	29.9	60.3

Cash Flow Statement Key Items

In terms of its balance sheet, Tesla doubled its assets in the past year. Overall in the last 5 years Tesla achieved 44% CAGR in assets, 57% in long-term debt, and 19% in book equity.

Tesla improved its quick ratio significantly from 0.5 in 2012 to 1.3 in 2013. Current ratio increased from 1.0 in 2012 to 1.9 in 2013, showing strengthened short-term liquidity. Tesla's debt to equity ratio dropped to historical low 3%, due to the strong performance of Tesla stock in the market.

In 2013, Tesla's stock grew from \$33.2 to \$151.1 at year-end, making Tesla a top performer and a rising star in the eyes of hedge fund managers.

Since Tesla is still unprofitable by most metrics, return ratio analysis does not provide much value.

USD in million	12/31/2013 USD	12/31/2012 USD	12/31/2011 USD	12/31/2010 USD	12/31/2009 USD
Balance Sheet Key Items					
Cash & ST Investments	848.9	221.0	303.8	173.2	326.1
% of Assets	35.12%	19.83%	42.58%	44.85%	84.29%
Receivables (Net)	49.1	26.8	9.5	6.7	3.5
% of Assets	2.03%	2.41%	1.34%	1.74%	0.90%
Inventories - Total	340.4	268.5	50.1	45.2	23.2
% of Assets	14.08%	24.10%	7.02%	11.70%	6.00%
Current Assets - Total	1,265.9	524.8	372.8	235.9	357.1
% of Assets	52.38%	47.10%	52.26%	61.10%	92.28%
Property Plant & Equipment - Net	1,120.9	562.3	310.2	122.6	23.5
% of Assets	46.38%	50.47%	43.47%	31.75%	6.08%
Other Assets	23.6	22.0	22.4	22.7	2.8
% of Assets	0.98%	1.97%	3.14%	5.89%	0.71%
Total Assets	2,416.9	1,114.2	713.4	386.1	386.9
Accounts Payable	304.0	303.4	56.1	29.0	15.1
% of Assets	12.58%	27.23%	7.87%	7.50%	3.90%
ST Debt & Current Portion of LT Debt	7.9	55.2	9.0	0.3	0.3
% of Assets	0.33%	4.95%	1.26%	0.07%	0.07%
Other Current Liabilities	298.7	170.8	116.3	47.1	39.5
% of Assets	12.36%	15.33%	16.31%	12.21%	10.20%
Current Liabilities - Total	675.2	539.1	191.3	85.6	57.5
% of Assets	27.93%	48.39%	26.82%	22.16%	14.86%
Long Term Debt	599.0	411.5	271.2	72.3	46.2
% of Assets	24.78%	36.93%	38.01%	18.73%	11.95%
Other Liabilities	287.7	35.9	19.9	15.4	3.5
% of Assets	11.90%	3.22%	2.79%	4.00%	0.89%
Total Liabilities	1,749.8	989.5	489.4	179.0	108.4
% of Assets	72.40%	88.81%	68.60%	46.37%	28.02%
Total Shareholders Equity	667.1	124.7	224.0	207.0	278.5
% of Assets	27.60%	11.19%	31.40%	53.63%	71.98%
Total Liabilities & Shareholders Equity	2,416.9	1,114.2	713.4	386.1	386.9

Balance Sheet Key Items

Five Forces

Force	Strategic Significance
Intensity of Existing Competition	Moderate/High
Threat of New Entrants	Low
Threat of Substitute Products	Low/Moderate
Bargaining Power of Suppliers	Low
Bargaining Power of Consumers	Low

Bargaining Power of Buyers

Tesla has carved out a unique niche for itself in the market and as such operates in a seller's market. Though the company sold only 20,000 Model S vehicles in 2013, demand far outstrips supply. In anticipation of the initial release of the Model S in U.S. markets in 2012, its waitlists were over one year long, and there continue to be long waits for Tesla products in U.S. and European markets.

Currently priced at \$69,000, the flagship Model S is accessible only to wealthy consumers. Despite the high price tag, the company faces no shortage of demand for its vehicles; wait times of over a month are still common for consumers. But as other car companies continue to invest in electric vehicles and make the market more competitive, Tesla may no longer enjoy such a large and beneficial mismatch between supply and demand. To this end, Tesla has expressed an interest in attracting more middle-class consumers. CEO Elon Musk recently announced plans to develop a smaller electric vehicle that will be available at \$35,000 within the next four years.

Because demand for scarce Tesla Model S vehicles is currently concentrated among high-income individuals with price-inelastic demand, buyers do not have high bargaining power. Tesla recognizes that this advantage is temporary. There are a very limited number of wealthy people and the competitive market forces will not allow Tesla to operate with such an advantage in the long term. It is likely that Tesla's \$35,000 car will meet higher demand than comparable alternatives, partly because Tesla has built up a

strong reputation with the excellent performance and safety ratings of its Model S. While competitive forces will strengthen bargaining power of buyers in the coming years, we expect that the bargaining power of buyers will still remain low.

Threat of Substitutes or Complements

The Tesla Model S is a fully electric high-performance vehicle. This combination is not common. Other commercially available fully electric cars such as the Nissan Leaf and the Ford Focus Electric lack the performance capabilities of the Model S. Nissan and Ford do not appear to be interested in producing fully electric sports vehicles in the near future; their efforts in the electric vehicle market appear to be in the realm of affordable compact cars. Performance vehicle manufacturers such as Daimler-Benz and BMW do not yet produce fully electric sports vehicles either. Though these German manufacturers are developing electric sports vehicles, these designs are expected to have a driving radius of below 50 miles: significantly under the 200-mile radius of the base Model S and a major limitation. As such, it does not appear that Tesla will face much direct competition in the market for fully electric performance vehicles in the near future.

Tesla markets mainly to a wealthy and environmentally conscious consumer base. These consumers may also be interested in hybrid vehicles such as the Toyota Prius, which have far higher miles per gallon metrics than traditional gasoline-powered vehicles. However, hybrid vehicles are imperfect substitutes for pure electric vehicles, and the clean-technology car industry appears to be moving in the direction of fully electric vehicles, meaning that Tesla will likely not face much competition from hybrid vehicles.

According to the Department of Transportation, total electric vehicle sales in the U.S. have increased from 17,000 in 2011 to roughly 96,000 in 2013, and production is continuing to expand. Electric vehicles will only continue to increase in popularity and continue to eat into the market share of hybrid vehicles.

One thing to watch out for is the development of hydrogen vehicles, but these projects are still very much in their early phases.

Power of Suppliers

Tesla uses over 2000 parts sourced from 300 different suppliers globally in its Model S vehicle. The most important component of an electric vehicle is the battery cell. Most of these battery cells are purchased from single sources. As such, these suppliers have a high degree of power over Tesla. Because the company does not have alternative suppliers for most of the components in battery cells, it may be very difficult for Tesla to deal with supply disruptions, especially in the short-term. Tesla recently announced plans to build a \$5 billion Gigafactory to produce battery packs and bring some of the battery cell production in-house; this should be an effective way to deal with possible supply chain disruptions. This factory, which is projected to produce in 2020 more than the entire lithium ion battery production of 2013, will make Tesla the dominant supplier of battery cells and battery packs, reducing the power of the company's external suppliers.

In addition to battery cells, Tesla also purchases large volumes of aluminum, steel, nickel, and copper for the internal wiring and external shell of its vehicles. These metals are traded in highly liquid global markets and it is unlikely that there will be major fluctuations in their supply. Prices for such metals are set in competitive markets, so it is difficult for individual suppliers to set unfavorable prices without losing market share.

The company generally does not maintain long-term contracts with its suppliers, ensuring its flexibility to switch suppliers and take advantage of better prices.

Industry Rivalry:

The automobile industry is a highly competitive industry with long-established household names like Toyota, Honda, Ford, and Daimler-Benz. Though Tesla does not face very much direct competition in its market niche for high-performance pure electric vehicles, these established auto industry players may be able to devote more resources to research and development than Tesla. While Tesla is currently far ahead of its competitors in the field of electric vehicles because of its exclusive focus on electric vehicle production, these larger rivals may be able to bridge the technological gap with greater resources.

Tesla's plans to build a Gigafactory signal its intention to become the dominant player in the lithium-ion battery market. This factory will produce more batteries than can be fit into Tesla's vehicles, and the company will likely become a supplier of lithium-ion batteries to a variety of other companies, including automobile companies and electronics companies. Though it is difficult to assess Tesla's rivalry in an industry it has not yet entered, we believe that Tesla will emerge as the foremost lithium-ion battery producer when the Gigafactory is completed. Tesla's successful \$2 billion bond offering in February 2014 for the production of the factory is an encouraging sign that demonstrates Tesla's ability to raise capital to pursue ambitious projects.

Barriers to Entry/Exit:

Because it makes use of cutting edge technology, the electric vehicle industry has major barriers to entry. Tesla's exclusive focus on electric vehicles has given it a major competitive advantage over traditional automobile companies, which have not allocated as much time or resources into research and development for EVs. The company's founder and CEO, Elon Musk, has built a reputation and a network of contacts that have allowed him to raise capital more easily than other aspiring entrepreneurs may be able to. Many view Elon Musk as a visionary and talented engineers are drawn to the excitement of working in a new field alongside an iconic figure. This reputation creates a barrier to entry; it is more difficult for older, traditional car companies to attract talented engineers than it is for Tesla. Much like Hewlett Packard and Intel struggle to attract top computer science graduates who gravitate towards Google and Facebook, Tesla has been highly successful in poaching top engineering talent from universities and industry. Reputational issues also make it difficult for competitors to market to Tesla's target demographic of wealthy, educated, environmentally conscious people. These people are far more likely to purchase Tesla's products than Ford's products.

SWOT Analysis

Strengths	Weaknesses
Management	Inability to meet demand
Reputation and awards	
First mover advantage	
Direct Sales	
Opportunities	Threats
Increased production	Competitor vehicles
Diversify revenue resources	Direct Sales Ban
Overseas expansion	Technological threats

Strengths:

Management

Tesla is a peerless automobile maker that offers the customer a unique experience. By sticking to its Silicon Valley roots, the management of Tesla differentiates itself from the management of other automakers. CEO Elon Musk is a dreamer and an innovator, similar to Larry Page of Google or Mark Zuckerberg of Facebook. Tesla aspires to accelerate the world's transition to electric vehicles, hoping to one-day lesson global dependence on petroleum-based transportation. Although Tesla currently only makes electric vehicles for affluent customers, the company's long-term goal is to produce technology that will decrease the price of electric cars available to consumers.

Tesla's high-profile management and dream big mentality makes it one of the most attractive companies to work for, far more so than competing automakers such as Toyota or Ford. This image allows Tesla to attract the best and brightest, which should give them a strong advantage over competing car manufacturers. Most, if not all of the current value of Tesla, is currently derived from their human capital. From 2013 to 2014, Tesla's stock price increased an astonishing 618%, despite only a small rise in earnings and profitability. This optimism is mainly due to expectations of future innovation, based

upon extreme confidence in the ability of Elon Musk and the rest of the Tesla management team. A current boost in sales does give this increase some merit. The management just recently announced plans to build a giant factory, called the Gigafactory, which will revolutionize the production of lithium-ion batteries. This innovation will be discussed in more detail in the opportunities section below.

Lastly, Tesla's management has strong support from its shareholders. Shareholders often constrain many public companies, demanding earnings growth each quarter, possibly hindering future earnings for results now; however, Tesla shareholders appear to 100% trust CEO Elon Musk's directions, which are often focused on future innovation, not profitability. Despite the lack of profitability, Tesla has shown since the beginning that it has no difficulty in acquiring funding for new investments. Tesla recently raised \$2 billion for the Gigafactory.²

Reputation and Awards

Tesla is the most technologically advanced electric vehicle in the world today. Often deemed the car of the future, the Model S appeals to affluent individuals that are environmentally aware and technologically inclined. Although this is not a humongous market, it is a profitable one, and one which can demand high prices. Tesla has become a status symbol throughout California, and its prestigious reputation is spreading across the country. It is the only high-performing electric sports car on the market. It offers acceleration of 0-60 miles per hour in just 4 seconds. For environmentally aware consumers looking for a luxury vehicle, there is no substitute.

The Tesla Model S won the 2013 Motor Trend Car of the Year. It is the first ever winner of the award not powered by an internal combustion engine. Tesla batteries have the longest range of any electric vehicle in production. The Nissan Leaf, a possible substitute, achieves a range only up to 100 miles. In comparison, the Model S has a maximum range of 265 miles, completely annihilating the competition. The Model S also achieved the

² http://www.motortrend.com/oftheyear/car/1301_2013_motor_trend_car_of_the_year_tesla_model_s/

best safety rating of any car ever tested from the National Highway Traffic Safety Administration.³

First Mover Advantage

The nascent industry of electric vehicles provides an opportunity for enormous growth. Obtaining the most market share, as well as remaining the most technologically advanced, is the key to capitalizing on this opportunity. Tesla has nearly 250 patents covering the Model S, with more pending. The success of the Model S will be hard to duplicate, especially given the difficulty of producing this novel technology. This provides a huge competitive advantage for Tesla. Tesla sells electric powertrain components to Toyota and Daimler. These strategic partnerships ensure that Tesla products will be in more vehicles. Tesla recently completed first round funding for the Gigafactory. The complex technology and massive funding needed to create the Gigafactory makes such an idea difficult to duplicate, especially in the short-term. Taking advantage of economies of scale, the Gigafactory will significantly reduce the cost of lithium-ion batteries, the limiting factor in the production of electric vehicles. It will also make Tesla the single largest producer of lithium-ion batteries, making Tesla the biggest player in this market as well. In the electric vehicle market the first mover has a huge advantage from the learning curve associated with producing new technology, as well as from being the first to establish input supply logistics.⁴

Direct Sales

After completely changing the way people think about electric vehicles, Tesla then contrived a new business model to sell its vehicles. Normally, vehicles from car manufacturers reach the public through a third party dealer. Tesla delivers its vehicles through a more unconventional way; it sells directly to consumers. Tesla sells its vehicles

³ <http://www.teslamotors.com/about/press/releases/tesla-model-s-achieves-best-safety-rating-any-car-ever-tested>

⁴ <http://blogs.barrons.com/stockstowatchtoday/2014/03/26/tesla-motors-here-comes-the-competition/?mod=BOLBlog>

through retail stores and smaller format galleries that have an ambience similar to an Apple store. The vehicles are purchased online, not at the stores, and the buyer normally must wait between one and three months to receive their vehicle due to high demand. Dealerships are trying to fight back against this new model, and in certain states have successfully banned the sale of Tesla's; however, in many of the largest markets, such as California and New York, it is legal to sell directly to the consumer. Throughout the next decade it is likely that this direct sales model will no longer seem so bizarre, and may even eventually become the norm.⁵

Weaknesses:

Tesla's greatest weakness is the potential pitfall of not being able to produce enough vehicles. Over the past few years Tesla went from producing hundreds of cars per year to over 20,000 per year, an auspicious sign. However, they may not be able to continuing expanding production capacity at such an astonishing pace. As demand continues to increase, production capacity must also increase.⁶ Tesla has shown that it can do it before, so it must continue proving this throughout the next decade. As production grows, it will be increasingly harder to continue ramping up production. Producing vehicles is very capital intensive, with huge infrastructure costs. This is a large risk for a company to take with a new product in a nascent industry. A final weakness of Tesla had been its inability to make a profit; however, in Q4 2013, ten years after the founding of the company, Tesla made its first quarterly profit.⁷

⁵ <http://www.smartplanet.com/blog/the-report/teslas-sales-model-its-simple-dont-sell-cars/>

⁶ <http://www.fool.com/investing/general/2014/02/12/tesla-motors-incs-greatest-weakness.aspx>

⁷ <http://www.forbes.com/sites/greatspeculations/2014/03/11/gigafactory-will-cost-tesla-5-billion-but-offers-significant-cost-reductions/>

Opportunities:

Increased Production

The market for electric vehicles is growing rapidly. In 2012, 53,000 electric vehicles (16 different models) were sold in the United States. In 2013, roughly 96,000 electric vehicles were sold. The Chevrolet Volt was the industry leader, selling 23,094 vehicles. The Nissan Leaf was also a top seller with a total of 22,610 vehicles sold in 2013. Tesla, in a much higher price range, was able to sell nearly 20,000 vehicles, not far off the leaders, despite having a much higher price. If Tesla can increase production and lower its price while maintaining its current quality, Tesla has the opportunity to become the largest player in the electric vehicle market. Future models will be priced cheaper than the hugely popular Model S, providing an opportunity to compete head to head with Chevrolet and Nissan. Tesla expects to deliver over 35,000 Model S vehicles in 2014, which would be a substantial 55% increase over 2013. Achieving this type of increase year in and year out will make Tesla the most dominant force in the electric vehicle industry.⁸

Diversify Revenue Sources

Tesla has the opportunity to diversify their future revenue sources. Tesla can earn significant revenue through the sale of vehicles, electric powertrain components to other car manufacturers, and lithium-ion batteries. Tesla currently develops full powertrain systems and components to Daimler, and Tesla has developed a full electric powertrain system for Toyota for use in its RAV4 EV. Tesla can profit and grow from a strategy similar to Microsoft's original strategy. The consumer can either buy a Tesla model or the consumer can buy a different company's electric vehicle that contains Tesla parts.

Tesla has an opportunity to become a monopsony for lithium-ion batteries. Tesla's giant Gigafactory, as stated before, will have the capacity to produce enough batteries for 500,000 vehicles by 2020, more than worldwide production by all manufacturers in 2013.

⁸ http://www.greencarreports.com/news/1089443_plug-in-electric-car-sales-for-2013-almost-double-last-years

This massive demand for raw materials to construct the batteries should be large enough to give them considerable power over the raw input suppliers. This should allow them to keep input prices below, or at, competitive prices. This amount of production of lithium-ion batteries will guarantee that Tesla will be able to ramp up electric vehicle production within the next six years. Also, if demand for Tesla vehicles does not keep up with this increase in supply, Tesla will be able to sell these batteries to other car manufactures, still a profitable venture.⁹

Overseas Expansion

Tesla will continue expanding overseas in the coming months. Tesla already has retail stores in Europe and Japan, and it will begin selling the Model S in China this April. There is high demand from wealthy consumers in China for the Model S. With a starting price of 734,000 Yuan (\$118,000), the Model S is a luxury good that will display their status symbol. Tesla began taking orders last year, and the orders have been piling up. The estimated wait for an order placed today in the Beijing store is one year. At the moment, demand is greatly outpacing supply. The current scarcity of the good makes the Model S more desirable and increases its reputation. This is an important benefit in the short-term, but Tesla will greatly profit once it is able to ramp up production capacity to meet demand. The large Chinese markets provide a huge opportunity for expansion.¹⁰

Threats:

Tesla is susceptible to many threats that are common to companies in nascent industries. It is imperative that Tesla keeps and increases its market-share in the electric vehicle industry. Strategic partnerships should help mitigate some of the risk of large car manufacturers entering and gaining a stronghold in the market place, but this risk can never be fully eliminated. If potential competitors' vehicles become more attractive to

⁹ <http://www.forbes.com/sites/greatspeculations/2014/03/11/gigafactory-will-cost-tesla-5-billion-but-offers-significant-cost-reductions/>

¹⁰ <http://adage.com/article/global-news/chinese-excited-tesla-s-model-s-launch-april/292352/>

consumers, Tesla may have to change its main source of revenue from producing cars to producing powertrain components. It is important that Tesla continues to build its reputation to stay ahead of competitors. Perceptions can make or break a company in a new and growing industry. The perception that Tesla produces the greenest, safest, and best quality electric vehicles on the market needs to remain. If a different carmaker makes a greener car or a higher quality vehicle than Tesla could be in trouble. Although Tesla was able to overcome the backlash from the recent engine fires, more events such as those could hurt Tesla's reputation and destroy value.

In multiple states, auto dealer lobbyists have succeeded in banning the direct sale method of Tesla vehicles. It is now illegal for Tesla to sell its vehicles without selling through a dealership in five states: Arizona, Texas, Virginia, Maryland, and New Jersey. In these states, the Tesla shops in existence can no longer say what the car costs, nor can they help a customer actually purchase a car. These shops now act as galleries where people can view the vehicles, but that is all. If more states decide to ban the direct sale of Tesla vehicles, this could potentially pose a large threat to Tesla.

It is currently too early to see how the ban will affect Tesla sales. In the near future, banning direct sales in certain states should not pose a huge threat to Tesla. One reason is that demand still exceeds supply for Tesla vehicles. Also, there is the possibility that outlawing Tesla vehicles in certain states makes the vehicles seem more exclusive to consumers in those states and actually increase demand. Most importantly, consumers from states that have outlawed the direct sale of Tesla vehicles can still purchase a vehicle online and have it delivered to them in the banned state. These regulations only deal with sales, so Tesla service centers will not be affected. There is also significant uproar by consumers across the country on these rulings. For example, in a Los Angeles Times poll 99 percent of respondents said that Tesla should be able to sell its vehicles directly. In North Carolina and Austin, Texas, similar polls were conducted with similar results: 97 percent and 86 percent, respectively.¹¹ Thus, with growing consumer

¹¹ <http://www.teslamotors.com/blog/people-new-jersey>

aggravation and Tesla rearing up to fight these judicial rulings, it does not appear that outlawing the direct sale of Tesla vehicles in certain states will pose a long-term threat.

There are also technological threats to Tesla's dominance. New technology may be introduced that no one currently knows about. If this new technology is an improvement on the status quo, Tesla could lose profitability. The introduction of a new type of vehicle that runs on a completely different type of fuel, yet to be discovered, could be devastating to the electric vehicle market. Also, a significant drop in oil prices will substantially decrease demand for electric vehicles. Tesla needs to make huge investments to increase supply capacity for current demand levels. If future demand does not meet expectations, Tesla will have spent billions on unneeded capacity. A final scenario that would hurt Tesla is if electric vehicles never become as popular as Elon Musk hopes.¹² The biggest oil companies have calculated, most likely a biased calculation, that over the next thirty years only 4-5% of all cars globally will be electric vehicles. While still a large increase from current production, it is not a big enough increase to make Tesla one of the largest car companies in the world.¹³

¹² <http://blogs.barrons.com/stockstowatchtoday/2014/03/26/tesla-motors-here-comes-the-competition/?mod=BOLBlog>

¹³ <http://www.reuters.com/article/2012/02/01/us-electric-car-big-oil-idUSTRE81011820120201>

Strategic Recommendations

Diversify Main Revenue Sources

Tesla currently occupies the upscale market portion of the electric vehicle industry. In order to significantly increase profitability and compete with the major car companies, Tesla will have to expand its source of revenue; simply producing and selling luxury vehicles will not allow Tesla to compete on a grand scale. Tesla should diversify and make a major source of revenue come from powertrain components and lithium-ion batteries. Tesla should remain a luxury good in foreign countries such as China, where affluent buyers look for vehicles that are considered to be status symbols. Elon Musk desires to make electric vehicles affordable for consumers. Although a noble idea, Tesla should carefully consider if mass-producing the Tesla brand would benefit them in all markets. Tesla plans to make a Model E that will sell for approximately \$30,000. It is imperative that Tesla vehicles retain their luxury image and impeccable reputation, even in a lower price range. Diversifying their revenue streams into two parts, vehicles and vehicles components, will allow Tesla to dominate two different, but connected, markets.

Become the Dominant Battery Producer

The most important recommendation for Tesla is to continue constantly innovating. The company that can produce the cheapest lithium-ion batteries, a major limiting factor of electric vehicles, will have a considerable competitive advantage. Batteries are currently very expensive to produce, and sheer production capacity does not yet exist. The Gigafactory should produce enough batteries for 500,000 vehicles by 2020. 500,000 batteries are more than the entire worldwide production of lithium-ion cells in 2013.¹⁴ The Gigafactory will take in raw materials on one end and produce completed battery packs at the other. This differs from current battery production, which is split up. Parts of batteries are made in different factories and then sent to another factory that assembles them into cells, and then the cells are often assembled into a battery pack somewhere

¹⁴ <http://www.technologyreview.com/view/521201/for-tesla-motors-success-is-all-about-the-batteries/>

else. The Gigafactory will cut out the middleman and make the entire product in house. Introducing this economy of scale will decrease battery pack prices by 30%.¹⁵

Expand Globally

Tesla has the opportunity to expand globally to places with a strong infrastructure and an affluent consumer base. Company officials at Tesla predict that combined sales in Europe and Asia will nearly double those in North America. Global sales for 2014 are expected to increase 55%. To deal with European demand, Tesla will open 30 new stores and service centers as sales increase.¹⁶

To help combat air pollution in China, the Chinese government wants to see 5 million alternative energy-powered vehicles on Chinese roads by 2020. Tesla can provide vehicles for the affluent portion of the market. Tesla is planning to develop free charging stations in China, which will allow Tesla Model S owners to drive long distances for free.

Continue Increasing Demand

Lastly Tesla, in addition to other car companies, needs to increase overall demand for electric vehicles. By creating strategic partnerships with other carmakers, Tesla and other companies can increase demand for electric vehicles, which will benefit all electric vehicle producers. One possible method would be to lobby and change policy, so that the government would give tax breaks and subsidies to electric vehicle producers in order to help them increase production capacity. Another method for increasing demand for electric vehicles is to continue extending battery range and adding more fueling stations in countries where the Supercharger network is not already established. Interest in electric vehicles will grow when they can be driven the same range as gasoline powered automobiles. Tesla Superchargers currently allow Model S owners to travel for free, but

¹⁵ <http://www.teslamotors.com/blog/gigafactory>

¹⁶ <http://moneymorning.com/2014/03/05/international-expansion-spark-tesla-nasdaq-tsla-stocks-next-great-run/>

they are only set up between cities along well-traveled highways in North America and Europe. Superchargers provide half a charge in as little as 20 minutes. There are currently 84 stations in the United States, and there are 14 stations in Europe.¹⁷ Increasing the amount of Supercharger networks throughout markets where Tesla's vehicles are sold will increase demand. Even though demand currently exceeds supply for Tesla vehicles, it is important that this continues in the coming years so that Tesla remains a hip and innovative company that will one day change the world. Tesla continuously needs to increase capacity while decreasing costs. Some analysts may be wary of the Gigafactory due to its substantial cost and risk; however, this factory will decrease electric vehicle costs while significantly increasing production capacity for the entire industry.¹⁸ Tesla's first mover advantage in the large-scale production of lithium-ion batteries will increase revenue and market share over the coming years.

¹⁷ <http://www.teslamotors.com/supercharger>

¹⁸ <http://www.forbes.com/sites/markrogowsky/2014/02/26/tesla-5b-gigafactory-bombshell-500000-cars-by-2020/>