A Deep Dive into Tesla's Business Strategic Options in Finding a Winning Strategy

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Abstract

Research Objective and Importance of the Topic

Strategic analysis needs to follow a logical structure in order to come up with effective solutions. We integrate multiple strategy tools in a logical pattern, and develop working steps of how to use those strategy tools step by step. Specifically we use Tesla as our research subject in the case study, and showcase a business example of integrating analysis tools to identify opportunities, understand internal capabilities, and come up with sound strategic options.

Methodology and Key Findings

We first apply the PESTEL analysis and the five-force model to understand Tesla's current status, and identify the potential opportunities and threats from the macro and industry environments. We further employ the strategic group mapping framework to contrast Tesla with other major auto companies on the basis of the customers-perceived luxury; and thus sort out a typology of four competition clusters that include "budget brands", "utilitarian brands", "luxury brands", and "high luxury brands". The typology helps us to understand the competitive landscape of the auto industry, and which company might become the most direct competitors to Tesla. For the internal analysis, we use the value-chain analysis framework to understand Tesla's core competencies. Finally, we propose a list of recommendations that would help the company to fully exploit their existing strengths to take advantage of external opportunities, and mitigate external threats; some defensive competition tactics are suggested to prepare the company for the worst possible scenario. **Keywords:** Tesla, strategic analysis, external analysis, internal analysis, SWOT analysis

Strategic analysis needs to follow a logical structure in order to come up with good decisions and find effective solutions. To address the challenge of internal and external analysis, we integrate multiple strategy tools in a logical pattern, and develop working steps of how to use those strategy tools step by step. Specifically in this research we applied the analysis framework to our research subject Tesla in identifying potential opportunities, and understanding its strengths and capabilities. The analysis framework builds the good grounds and the analysis guide for coming up with sound strategic options.

OVERVIEW: TESLA AND ITS CURRENT STATUS

Tesla started with Model S to compete in the luxury vehicle segment, and supplemented it with Model X as a luxury crossover. Tesla also gets involved in the substantial developments on energy. It offers products in sustainable energy, such as the PowerPack and PowerWall. However, the major energy advancements are related to its vehicles' network of charging stations, which seems much more synergistic with its vehicle-based product offerings. The rapid expansion of the supercharger network is seen over time when Tesla continues monetizing this aspect of its business (Tesla, 2016).

Tesla also engages in manufacturing electric powertrain components for other automotive manufacturers. However, this makes up less than 10% of its revenues (Tesla, 2015). The major part of its business is the selling of its vehicles, which it distributes through a network of company-managed, Apple-like stores – the number of which is increasing. While Tesla has lobbied around state by state to allow for the direct sale of their cars, Tesla has managed to increase the number of stores as well as the number of states who approved Tesla's direct sale model. While developments in energy, electric vehicles, and powertrain

components still forms the trifecta for Tesla's business, the selling of electric vehicles forms the bulk of Tesla's revenues.

In 2017, Tesla offered Model 3 with a much lower price (e.g., the sales price starts at \$35,000) and a target market of ordinary people. Yet it remains questions if the effective scaling of the Model 3 requires manufacturing capabilities beyond Tesla's resources and threatens to disrupt customers' view of Tesla's upscale brand.

Tesla's financial performance is generally comparable with other major automotive manufacturers. While Tesla sold far fewer cars than its counterparts in the same time period (Wayland & Burden, 2016; Heisler, 2016), its market capitalization/value is not far off from major automotive manufacturers like G.M. and Ford (Yahoo Finance, 2019).

APPLICATION OF STRATEGIC ANALYSIS FRAMEWORKS ON TESLA'S STRATEGIC OPTIONS

A number of tools and theories can be applied quite effectively to the Tesla case. A complete strategic analysis incorporates both external and internal perspectives. External perspective mainly examines impacts from the external environment in terms of potential opportunities and threats; internal perspective looks inside the organization to identify organizations' internal strengths and weaknesses. As to the external analysis, we start with the PESTEL analysis to understand the macro environment made up by Political, Economic, Sociocultural, Technological, Ecological, and Legal factors, and how Tesla might be impacted by those conditions and trends. We further go beyond the PESTEL analysis to examine the industry environment using Porter's five forces model to identify the potential effects from each of five forces (i.e., competitors, new entrants, substitute products, suppliers, and buyers) as they relate to the industry profitability. Finally, we apply the strategic group mapping framework to visualize the company's competitive positioning on the market and identify the most direct competitors within the industry.

Understanding the Emerging Trend in the General Environment using the PESTEL Analysis

There is a strong connection between the political, social, and environmental aspects of the PESTEL analysis as it relates to automotive manufactures – Tesla in particular. Fossil fuels are a limited supply of energy and have negative environmental impacts – from sickening smog to global warming. As people have come to realize the environmental effects of cars, there has become a social push to find cleaner options. Some people – particularly younger people with smaller wallets living in bigger cities – have cut the carbon-producing cars out of their lives completely and now rely exclusively on the internet, public transportation, and Uber. This social push towards environmental sustainability has also created a political movement, not just in the U.S., but worldwide in an attempt to shift the world way from fossil fuels and towards clean, renewable energy. In fact, politics in the U.S. have made the IRS issue a Plug-In Electric Drive Vehicle Credit. This credit is good for up to \$7,500 (IRS, 2016). However, this credit begins to phase out when 200,000 electric vehicles have been sold, so Tesla may have to devote resources managing this political aspect to try to ensure this credit remains in place until Tesla finds itself in a more stable position.

These social, political, and environmental trends play favorably for Tesla, which has been able to utilize technological advancements – particularly in batteries – to develop long-range electrical vehicles to capitalize on these trends. Tesla spends hundreds of millions of dollars each year in R&D to develop the most cutting-edge technologies. This cost must be recovered, which has made Tesla charge a premium for its vehicles. From an economic standpoint, while increasing crude pricing is driving up the cost of gasoline, Tesla's vehicles make the breakeven point between a normal vehicle and Tesla's vehicles selling between \$70,000 and \$150,000 extremely hard to meet. For the average American, who has not seen his or her real income grow since the 1990's, this premium is difficult for many families to justify. This economic aspect, along with the potential expiration of the Plug-In Electric Drive Vehicle Credit, is driving Tesla in its development of the more affordable Model 3.

The legal aspect is also concerning. Most states require auto manufacturers to sell their vehicles through a network of dealers. In many states, Tesla has been the exception to this rule and has enjoyed a growing network of direct-to-consumer stores. However, a number of states have been stubborn in exempting Tesla, which hinders Tesla's potential growth. If Tesla wishes to achieve first-mover advantage in the electric vehicle market, it must solve this distribution issue before competitors have a similar alternative with a similar range.

Assessing Industry Dynamics in a Framework of Five-Force Model

Competitive rivalry is high in the automotive industry. The industry is mature and expects to grow at just 2.5% through 2021 (Peters, 2016), which means the industry will be unable to grow the market in a way that each company can gain business without taking it away from another competitor. Profits only account for 2.1% of industry revenues, which suggests that companies in this industry have difficulty achieving high returns (Peters, 2016). The top four automakers (Toyota, Volkswagen, G.M., and Ford) only account for 33% of industry revenues (Peters, 2016). This insinuates that the industry is fairly fragmented with many automotive manufacturers in existence. Buyer's bargaining power could be rated as high in this industry which is characterized by the sheer number of choices buyers are presented with, combined with the fact that there is no switching cost other than the actual cost of the vehicle. To combat buyer's bargaining power, many manufacturers spend great amounts of capital to build a brand and brand loyal customers (Peters, 2016). Tesla, who has built a name for itself as the top-notch manufacturer of luxury electrical vehicles, therefore needs to capitalize on its brand equity and protect the brand at just about any cost.

Supplier's bargaining power is likewise high. Purchases make up the bulk of industry costs. 77.4% of industry revenues goes towards purchasing costs; wages only cost automotive manufactures 5% of revenues, in combination with the power of unions in the automotive industry, those can only lead one to conclude that suppliers possess a great deal of power in this industry (Peters, 2016). This threat is particularly high in Tesla's case. Panasonic holds the key to Tesla's high strength batteries. Without the batteries Panasonic provides, Tesla's vehicles could not achieve the ranges they do and likely would not hold as much of an advantage over the electric vehicles from other companies. Larger economies of scale and contracts with key suppliers helps mitigate this risk. Tesla has such a contract with Panasonic, which it must manage carefully (Tesla, 2015).

The threat of substitution is high when more and more auto companies are coming into this digital race. In essence, the automotive industry helps move things – from materials to people to ideas. Other industries, such as railroads, airlines, and public transportation are also capable of moving materials and people. The internet further confounds the issue as ideas can easily move from one place to another without having to be physically transported. The plethora of choices a person can use to move things only serves to help drive down the profits of the automotive industry. In fact, many people – particularly millennials, are completely forgoing car ownership thanks to such substitutions (Snyder, 2016).

The saving grace of the auto industry is that the threat of new entrants is low. Not too many companies are liable to view an industry with high supplier power, high buyer power, and high threats of substitution – which leads to great competitive rivalry – as an attractive industry to enter into in the first place. However, if one did, it would first need vast amounts of capital. Vehicles are a bulky product and require a lot of space to produce and inventory, which is expensive. To manufacture vehicles efficiently, capital also has to be spent on assembly lines, robotic technologies, and other such equipment. Customers tend to be brand loyal – and building that brand leads to great expense (Peters, 2016). Vehicles also have to be designed, which can lead to substantial research and development expenses (Peters, 2016). Further driving up barriers to entry is the fact that manufacturers have to comply with stringent environmental and safety regulations (Peters, 2016). The automotive industry is not an easy one to enter into – assuming one would want to do so in the first place. Tesla's main concern is not new entrants to the overall automotive industry, but rather existing large competitors with substantial resources entering into electrical vehicles, which constitutes a much graver threat. To counter this, Tesla must take advantage of first mover advantage and careful segmentation.

The key take away here is that if Tesla wants to earn above average returns, it needs to position itself in a way to mitigate these forces. It must find ways to be a large enough customer to suppliers to maintain some bargaining power over them and also needs to manage suppliers in a way that it has more than one source for certain parts. For example, Tesla is very reliant on Panasonic for its batteries. The company must also build substantial brand loyalty to counter the bargaining power of buyers. It seems to have done this in its high-end luxury vehicles as the Model S is now the most popular luxury vehicle (Morris, 2016). But, lower volume, higher margin vehicles like the Model S are unlikely to give Telsa the power over suppliers it desires, it seems like a closer alliance with Toyota would serve Tesla well as it would take turn industry's largest player from a rival to an asset and hence lessen competitive rivalry, could help promote Tesla's brand loyalty, and could help Tesla achieve the scaled operations it needs to gain power over suppliers.

Mapping Strategic Groups to Understand the Competition Landscape

The automotive industry, like most others, typically take either a low-cost or a differentiated approach. While some vehicles are faster, can haul more, ride more comfortably, etc., which can help companies differentiate themselves, customers generally view these traits as niceties to have – luxuries essentially – beyond getting things from point A to point B. Hence, the broadest means one can use to map this industry is simply by comparing this broad perceived "luxury" definition with each brand's price. This can be seen below in Figure 1.

When compared to other companies on the basis of the luxury perceived by customers and price, Tesla is classified as a Luxury Brand. The Model S starts at \$72,700 and can go for upwards of \$92,150 (Tesla, 2016). The Model X starts at \$95,750 and can go for as much as \$147,300 (Tesla, 2016). While a luxury brand, it is also important to note that the largest of these groups is the utilitarian group, which contains all of top four largest automotive manufactures.

A number of companies in the utilitarian group – like Toyota, Honda, and Chevy – are working on electrical vehicles themselves and could be poised to become direct competitors to Tesla. However, Tesla has developed a name for itself in developing the best electrical vehicles around. Because it is able to differentiate itself in this manner and segment the market, it is able to charge a premium for its vehicles, and has been able to avoid direct competition with other electrical vehicles by staying in the luxury strategic group. It is this upscale, differentiated position as well as possible competition in the utilitarian group that makes the development of the Model 3 alarming as it is attempting to shift its strategic group by doing so into an area with much more potential competition. Additionally, the Model 3 threatens to cannibalize sales from Tesla's other vehicles and contribute much less in return considering it is starting at \$35,000. Furthermore, Tesla risks damaging its existing image as a luxury brand with the Model 3 and hence may not be able to charge as much for the Model S and X.

It is understandable why Tesla wants to develop a vehicle that sells in higher volume as it gives Tesla more power over suppliers, as previously mentioned. Furthermore, it needs more electrical vehicles on the road to justify its efforts in the supercharger network. However, Tesla should look for other arrangements for marketing the Model 3. It would be prudent to develop the existing relationship with Toyota and come up with an arrangement to market the Model 3.

Key take-aways. The automotive manufacturing industry is a very competitive one with low margins. However, Tesla seems to have done well in using technological advancements to take advantage of certain social, political, and environmental trends. While a contrast with Tesla's brand, all four of the largest manufactures operate under the utilitarian strategic group, and there are some benefits to entering the utilitarian group in regards to gaining power over suppliers as well as in expanding the supercharger network. However, this segment appears to be much more competitive and could damage Tesla's brand. A further worry is that there are major legal issues in allowing Tesla to scale its sales network effectively to allow for a larger market to distribute its vehicles.

Understanding Tesla's Internal Environment

Tesla's buildings include a 5.4 million square foot facility in Fremont, California, along with 8 other facilities ranging in size from an 8,190 square foot administrative building in Beijing to a 499,710 square foot building in Tilburg, Netherlands (Tesla, 2015). However, only Tesla's buildings in Fremont and Lathrop, California are owned, not leased (Tesla, 2015). Tesla's physical assets are worth a little more than \$8 billion with \$3.4 billion related to its property, plants, and equipment (Tesla, 2015). Given the \$30.85 billion value stockholders place on the company, it could be inferred that Tesla holds substantial intangible assets.

Intangibles include a number of things, such as Elon Musk's experience, the knowledge produced by R&D, Tesla's patents, and supplier relationships. For example, Tesla has close relations with Panasonic that involves Tesla's battery technologies. This relationship includes an agreement on battery pricing, which gives Tesla some stability on this cost (Tesla, 2015).

As of 2014, Tesla held 691 patents (Fung, 2014). In the same year Tesla gave up rights to all its patents to those who would use them in good faith (Cunningham, 2014). It is thus assumed that Tesla's focus on research and development have produced a knowledge base that meets the valuable, rare, difficulty of imitation, and difficulty of substitution framework to create a competitive advantage, and that Tesla's R&D team is so far ahead in the electric vehicle technology that it would be difficult for competitors to catch up.

Tesla describes its core competencies as being in "powertrain engineering, vehicle engineering, innovative manufacturing and energy storage" (Tesla, 2015). Boiled down to the basics, as a company focused on innovation, one can therefore clearly see Tesla's core competencies really lie in research and development. Indeed, Tesla spent \$718 million on R&D in 2015, which is 18% of its revenues (Yahoo Finance, 2016). Furthermore, most years Tesla more or less doubles its budget on R&D. It has gone from spending \$93 million in 2010 to the \$718 million in 2015.

Another intangible asset lies in Tesla's relationships with companies like Panasonic and Toyota. The relationship with Panasonic has allowed Tesla to procure batteries that no doubt play a large part in allowing their vehicles to travel 200-300 miles on a single charge. Tesla's relationship with Toyota, while somewhat adversarial in respects to the Rav4, has allowed the company some extensive resources. While Tesla has mostly used this relationship for financing purposes, this relationship certainly could be further leveraged to develop new capabilities. Such relationships have allowed Tesla to integrate their resources in a way that creates substantial value and leads to a unique, rare, and difficult to imitate or substitute knowledge base. As such, Tesla's relationships are certainly a source of competitive advantage that complements the competencies in research and development nicely.

To get a better view of potential competencies and weaknesses, it may be useful to perform a brief value chain analysis.

A key difference between Tesla's value chain and other automotive manufactures is that there are no dealerships and that Tesla uses a pull manufacturing process. This places sales at the very beginning of the value chain. The pull system does have some advantages – the company is less reliant on dealers (who may not try to sell Tesla's cars as hard as other vehicles), the bullwhip effect is reduced as there is little to no downstream inventory, and the company gets to interact more closely with its customers, which thereby allows the company to better learn customers' needs. However, there's no such thing as a free lunch. Using this direct approach is expensive. Instead of letting dealers bear the brunt of this expense, Telsa has to set up stores and hire salespeople, which cost them \$922 million in 2015 (Tesla, 2015). This is even greater than the amount Tesla spent on R&D – almost a quarter of company revenues. Furthermore, Tesla has experienced difficulty in getting states to accept the non-dealer sales model. This could cost Tesla its first mover advantage should these legal issues prevent Tesla from penetrating the entire U.S. market. Hence, while some would view Tesla's direct-sales model as a core competency, it does not seem to meet the valuable aspect of the resource-based view of the firm.

At the end of the day, it is Tesla's ability to develop superior electrical vehicles and be able to power them with an extensive energy network that leads to its competitive advantage. Of course, it is Tesla's

capabilities in research and development and management of key relationships that will enable this to take place.

FINDING A WINNING STRATEGY: EXPLORING STRATEGIC OPTIONS

In order to take the car from a viable transportation option around town to a viable option around the country, Tesla has been rapidly expanding its supercharger infrastructure and using its R&D capabilities to develop swappable battery packs (Tesla, 2016). Hence, Tesla's R&D competencies fit nicely with these infrastructure-related initiatives.

Furthermore, Tesla kicked off Model 3 in late 2017. This vehicle is priced much lower than existing models and aims at the mass market. Tesla has yet to penetrate all the U.S. states due to legal issues related to the direct-sales model. It cannot possibly hope to move this vehicle in substantial volumes if it cannot penetrate the entire U.S. market. This is not to say Tesla should give up on the Model 3. After all, a large number of electric vehicles do need to be on the road to justify expanding the supercharger infrastructure. However, there does need to be more thought in how Tesla goes about achieving this.

In order to provide strategic options and hence, recommendations, it is useful to examine both internal and external information together. For this reason, placing the above data in the SWOT framework is of great value, as can be seen in Figure 2. As such, a list of potential strategic alternatives are generated that represent the possible ways that Tesla can use its strength to take advantage of opportunities and favorable trends in the environment (i.e., Strength-Opportunity Options), or use the strengths to mitigate external threats (i.e., Strength-Treat Options); as well as the defensive options that Tesla fixes its weaknesses to take advantage of the opportunities (i.e., Weakness-Opportunity Options), and prepare itself for the worst possible situation (i.e., Weakness-Threat Options).

The extended SWOT framework yields the following possible routes Tesla could pursue.

Option 1: Continue with the Status Quo with Special Attention to Superchargers

Option one is to continue with the status quo. Tesla would continue to market high end electric cars. It would still try opening up its Apple-like stores and allocate substantial resources not only in selling its vehicles, but also in fighting legal battles in an attempt to open up non-dealer stores in each state. Tesla would also continue investing in R&D, try to gain greater competencies in mass manufacturing, and expand on the Model 3 in order to meet the economic and supplier-related threats.

Tesla should continue rapidly expanding its supercharger network. The market needs this network to support these cars once they're on the road. Conversely, the number of electric vehicles on the road must increase dramatically to justify the expenditure on this network – thereby driving the need to launch the Model 3. As mentioned, launching the Model 3 poses a significant threat to Tesla's image and may cannibalize higher-dollar items. To make up for this, Tesla must monetize the supercharger networks and charge a small fee for its use, which would essentially make this option less about selling cars and make Tesla less of an automotive company and more about selling energy and making Tesla an energy company. The benefit here is that Tesla can diversify itself and become less reliant on the competitive automotive industry for its revenues.

However, this approach is very broad and resource-intense. Attempting to gain competencies that allows Tesla to directly market their products while gaining competencies in manufacturing while maintaining competencies in R&D and while expanding the supercharger network is a monumental task.

Option 2: Form a Closer Alliances, Use Licensing, and Partnerships with Toyota

Under this option, like option 1, Tesla continues its R&D activities and continues to expand its supercharger network and finds a way to charge users of this network in order to be less reliant on the competitive automotive industry. Tesla will continually work to innovate and better its technologies.

But, in this option, Tesla approaches car manufactures that are developing electrical vehicles themselves and offers to license the technology to them that will allow them to use Tesla's extensive supercharger network. This prevents these manufacturers from having to build the infrastructure themselves while at the same time providing a good revenue stream from both the licensing and monetization of the superchargers, and further cements Tesla as the leader in the field.

As for how to market and manufacture the economy category car Model 3, Tesla could look for an automotive manufacturer already with extensive branding in the utilitarian strategic group, with greater manufacturing abilities, and with an extensive dealership network. This manufacturer could market and manufacture the Model 3 for Tesla and pay Tesla a substantial royalty in return. Manufacturers like Ford, G.M., Volkswagen, Honda, and Toyota could be viable choices. Take Toyota for example, the two already have an established relationship and have worked together to develop the powertrain for the Rav4. Working more closely together could yield a myriad of benefits. Giving a company like Toyota the rights to manufacture and market the Model 3 would give them a mutual interest in Tesla's product and would help limit developments outside of Tesla in the electric vehicle market and would reduce competition in the field. In return, Toyota is renowned for their manufacturing abilities and have strong economies of scale to gain power over suppliers, which means they could produce the Model 3 at a low cost.

Furthermore, Toyota has an extensive dealership network that could sell mass volumes of the Model 3. As mentioned, Tesla spends nearly a quarter of its revenues in selling expenses. The industry, meanwhile, spends roughly three quarters of its revenues on purchases. The only reason the combined cost of purchases and selling has not bankrupted Tesla is the fact that it competes in a higher-end, luxury segment of the automotive industry that allows greater margin to cover its ridiculously high selling expenses. However, this will not be possible in the lower-cost, utilitarian market. This is why Tesla needs a partner with an extensive dealership network. The cost that would have been involved with selling vast numbers of the Model 3 can then be channeled back into research and development, into expanding and solidifying the industry position of Tesla's supercharger network, or simply passed on as profits to shareholders.

To conclude, the following recommendations can be given, regardless of which option is ultimately chosen:

- 1. Expand and monetize the supercharger network.
- 2. License technology to other manufactures that allows their electric vehicles to utilize Tesla's superchargers
- 3. Continue developing Model 3. Look for an agreement with a large automotive manufacturer in the utilitarian group to manufacture and market it.
- 4. Continue investing in the company's core competencies: research and development and relationship management.

References

- *i.* Cunningham, W. (2014). Tesla motors offers all its patents for good faith use. Road Show by CNET. Retrieved from https://www.cnet.com/roadshow/news/tesla-motors-offers-all-its-patents-for-good-faithuse/
- *ii.* Fung, B. (2014). How to build a tesla, according to tesla. The Washington Post. Retrieved from https://www.washingtonpost.com/news/the-switch/wp/2014/06/23/how-to-build-a-tesla-according-to-tesla/
- *iii. Heisler, Y. (2016). Tesla sold more than 50,000 model s sedans in 2015, a new annual record. BGR. Retrieved from http://bgr.com/2016/01/03/tesla-model-s-sales-2015/*
- *iv.* IRS, (2016). Plug-in electric vehicle credit. Retrieved from https://www.irs.gov/businesses/plug-inelectric-vehicle-credit-irc-30-and-irc-30d
- v. Peters, I. (2016).Global car & automobile manufacturing. IBIS World. Retrieved from http://clients1.ibisworld.com.libproxy.eku.edu/reports/gl/industry/default.aspx?entid=1000
- vi. Shelton, S. (2015). Tesla updates map of supercharger sites. Hybrid Cars. Retrieved from http://www.hybridcars.com/tesla-updates-map-of-supercharger-sites/

https://www.casestudiesjournal.com/

- vii. Snyder, J.B. (2016). Millennials don't want cars, but generation z does. Autoblog. Retrieved from http://www.autoblog.com/2016/03/16/generation-z-wants-cars-study/
- viii. Sparks, D. (2015). Tesla motors, inc. to roll out mobile stores. The Motley Fool. Retrieved from http://www.fool.com/investing/general/2015/05/21/tesla-motors-inc-to-roll-out-mobile-stores.aspx
- *ix.* Tesla, (2015), 2015 annual report. Retrieved from http://ir.tesla.com/secfiling.cfm?filingID=1564590-16-13195&CIK=1318605
- x. Tesla, (2016), Tesla. Retrieved from https://www.tesla.com/
- xi. Morris, D. Z. (2016). Tesla's model s is the best-selling luxury sedan in America. Fortune. Retrieved from http://fortune.com/2016/02/11/tesla-best-selling-luxury-sedan/
- xii. Wayland, M. & Burden, M. (2016). Auto industry sets all-time sales record in 2015. Detroit News. Retrieved from http://www.detroitnews.com/story/business/autos/2016/01/05/auto-sales/78295542/
- xiii. Yahoo Finance. (2019). Yahoo finance. Retrieved from https://finance.yahoo.com/

Figure 1. Strategic Group Mapping



Price

Figure 2. An extended SWOT Analysis

	Strengths	Weaknesses
	 Research and Development Direct Sales Knowledge that allows long range vehicles Supercharger infrastructure Luxury brand image based on unique product Strong relationships with companies like Toyota and Panasonic Exorbitant value on Tesla stock 	 Manufacturing sized for effective economies of scale Lack of effective distribution to every state Limited financial resources Extensive selling expenses related to the direct-sales model Spread-out business model
Opportunities	Strength-Opportunity Options	Weakness-Opportunity Options
 Growth in consumer demand for electric vehicles Government incentives for electric vehicles Growth in demand for clean, sustainable energy Lack of existing infrastructure to support electrical vehicles Automotive manufactures' interest in electrical vehicles Potential interest from consumers looking for an electric vehicle falling in the utilitarian strategic group 	 Monetize the supercharger network Use R&D knowledge to develop industry standards for electrical vehicle infrastructure License charging and battery technologies to other manufactures to develop a standardized infrastructure. Sell the exorbitantly-priced company to Toyota. Continue with development of Model 3 	• Capitalize on the interest of other manufactures. Toyota may be particularly appealing given the established relationship. Partnerships with such companies can provide the distribution, manufacturing, and financial resources Tesla needs.
Threats	Strength-Treat Options	Weakness-Threat Options
 Automotive manufactures' interest in electrical vehicles Outside developments in electrical vehicle technology Fragmented, highly competitive automotive manufacturing industry High reliance on suppliers, like Panasonic Increasing number of substitute products, from public transportation to the internet Legal environment may not be conducive to a direct-sales approach within the automotive industry Economic conditions can prevent the sale of high-dollar vehicles like Tesla's Launch of Model 3 could change customer's percentions of Tesla 	 Use the relationship with Toyota to form a partnership to market and manufacture the Model 3 under the Toyota brand with Toyota dealerships. This prevents some heavy competition from Toyota in the future as they will have a greater interest in this venture's success. Give suppliers some equity to prevent competition and assure mutual interests. Maintain efforts in R&D to stay ahead of outside developments in the field. 	 Negotiate legal contracts with suppliers to maintain predictable manufacturing costs. Use partnerships with companies like Toyota to build economies of scale and hence, power over suppliers while at the same time reducing competition. Build manufacturing up – once again, perhaps through joint efforts with someone like Toyota – to produce a more affordable electrical vehicle. Devote resources to the legal battles involved in opening up non-dealer stores in each state