

Tesla Recommendation for International Expansion

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Executive Summary

Tesla Motors is seeking to gain a more global presence and grow their business through international expansion. While a company can have numerous reasons for entering foreign markets, we will be focusing specifically on how Tesla can benefit from establishing a manufacturing plant in India and launching a marketing campaign in Singapore.

The purpose of the manufacturing plant in India is to also serve as Tesla's international headquarters, which would be located in Chennai. This will position us to receive immediate cost savings in the production of our vehicles and transportation costs to Asian, European, and African countries. Possible threats to entering the Indian market include infrastructure, corruption, and bureaucracy. We also believe the improvements in India's infrastructure through the AMP (automotive mission plan) agreement and our countries commitment to support our automobile industry stakeholders will make selling electric vehicles in India a very profitable market for the future.

Tesla should enter Singapore via EV test beds to qualify for a six-year vehicle tax exemption, while building its brand equity to make it more visible to the consumers. If the market condition is correct and the brand development is successful, the next step is opening a wholly owned showcase store that would house Tesla's sales force, managers, and mechanics who are responsible for advertising, public relations, and services for Singapore. To finance this marketing expansion we believe using your cash on hand is enough to start up a campaign. We estimated the initial investment to be between \$4-\$6 million and the annually costs would be approximately \$1.3 to \$2 million. Tesla should see positive returns within five years based on our sales estimates. This entry strategy accounts for threats such as cultural differences, strict government regulations, and competition.

Tesla Strategic Position

Our goal is to help you further your international expansion by first understanding your strategic positioning. As an up-and-coming electric vehicle company, your differentiating factor is an "electric car without compromises." Your Roadster competes with sports cars like Porsche and Ferrari while having the energy efficiency of a Prius, and we believe this to be a huge advantage against other sports cars in the market. However we understand that the Roadster is a means to generate revenue for the development of a more affordable family car, also providing zero emission electric power generation options.¹ With these goals in mind, Tesla is scanning for opportunities around the world to minimize cost and maximize revenue. You currently have facilities in the United States and throughout Europe where parts are being manufactured and assembled. Since you have limited resources, you must be very selective of the location for your expansion.

Before we go into further detail about potential locations, let us evaluate Tesla Motors' strengths and weaknesses for a better assessment of your expansion strategy. You are on the cutting edge of battery electric technology with good engineering and technology research capability. You build many of your own components in-house so it is tough for your competitors to duplicate. You have a first mover advantage by being the first company to offer a practical fully

¹ <http://www.teslamotors.com/blog/secret-tesla-motors-master-plan-just-between-you-and-me> "The Secret Tesla Motors Master Plan (just between you and me)" Accessed 13 Nov. 2011

electric sports car, recognized by Arnold Schwarzenegger, former governor of California, and Jay Leno, late night T.V host.² These are the high-end consumers you are targeting but they are a vast minority of the general public contributing to Tesla low brand recognition. You also do not have the economy of scale because of your limited resources. Those are the strength and weaknesses of your company that we must consider in your expansion.

The decision to expand into India signifies your commitment and belief in the long-term success of Tesla in international markets. India boasts one of fastest growing economies in the world with a Gross Domestic Product (GDP) of \$1.4 trillion in 2009. They are also simultaneously working on improving their countries infrastructure to be more favorable for automobile manufacturing, research and development, and business through the India's Automotive Mission Plan (AMP) 2006-2016. Due to its geo-centric location to the Asian market and its existing environment for multiple big name automobile manufacturers, Chennai, India will serve as our international headquarters. This facility will serve as a location where we can conduct further R&D, final vehicle assembly, quality control, and administrative tasks for cars being purchased in the Asian markets. Due to the largely to the lack of quality roads in India which inhibit the growth of docking stations and non existent government tax breaks for alternative energy vehicles, our immediate efforts in India will not be focused on sales but rather operations. We do believe though that with the AMP, rapidly growing GDP, and decreasing trade barriers, India will eventually prove to be a very lucrative automotive market in the future.

With your decision to expand your operation into India, we believe Singapore is another great market to enter to generate revenue. Singapore is an island state with a GDP of \$303.7 billion in 2010. It is one of the most densely populated countries with approximately five million people on 694 km² of land. Due to its geography, Singapore has limited options for deploying alternative energy like wind and solar on a large scale. Despite this disadvantage it is committed to bringing about reliable, sustainable and competitively priced energy to support economic growth and a greener tomorrow. The government is offering tax incentives for environmentally friendly cars with a 40% rebate of the open market value of the vehicle if eligible.

Motives for Expanding into India

The motives that drove our decision to open an international headquarters in Chennai, India was driven by three primary factors. The most immediate benefit, was the abundant amount of low-cost technical and managerial talent that India produces on a consistent basis. These low labor costs will provide us an immediate expansion in our production possibilities frontier for producing cars while also cutting down drastically on the plants fixed operating costs. Secondly, we found that both the historical data for the return on other foreign investments in India and their ability to successfully trade throughout India to be a sound indicator for predicting our success. Opening our plant in Chennai, India, an automobile hotbed for foreign companies, will allow us to benefit immediately from the cluster effect by receiving associated cost savings and forcing us to innovate to remain competitive. Lastly, the legal framework in India will offer protection for our investment, flexible financial management, and fair process for any issues that may arise.

² <http://www.mcafee.cc/Classes/BEM106/Papers/2008/Tesla.pdf> "Tesla Motors" Accessed 17 Nov. 2011

Low Manufacturing Labor Costs

In 2010, India's labor costs rose approximately 20% and surpassed China's average manufacturing costs by reaching USD 2.51 per hour to USD 2.68 per hour. India as a whole has seen how the recovery of domestic demand, inflation, and new government policies have led to greater labor costs for foreign companies across the board. Although there is some unpredictability in the growth rate for India's labor costs, our country will still hold a comparative advantage in labor costs to the US automotive labor market. While our overall manufacturing costs are higher than China's, our autoworkers are compensated 18% less at USD 3.30/hour and USD 4.02 respectively³. In addition, approximately 36% of our labor costs are contributed to employee benefits such as "Provident fund (social security), survivor insurance, pension contributions, state mandated 13th month pay, and double pay for overtime"⁴. We believe these large contributions to our employees' benefits will reduce our risk for public backlash and improve our image in the eyes of human rights activist who often pounce at abusive employers.

There has also been a consistent positive correlation between long-term growth rates and the low-dependency ratio's associated with a relatively youthful population. "According to a recent long-term growth forecast from banking group Goldman Sachs, demographic patterns may put Indian growth well ahead of Chinese growth by mid-century"⁵.

Comparatively, US workers in Ford or GM earned \$27 an hour plus benefits⁶ which means we cut down on labor costs by over 87%. As Tesla most recently reported in their Dec 31 2010 SEC filing⁷ to have 213 manufacturing department employees, we expect for this number to be at approximately 70 for our India headquarters. Our manufacturing plant will be significantly smaller than our US plant, and thus will not required as many workers. While the hourly pay rates for Tesla employees are likely to be higher than the average automotive laborer figures for both countries due to a greater requirement of skill and knowledge, we kept both figures constant in an attempt to account for this difference.

Low Administrative, IT, and Knowledge Based Positions Costs

³ http://www.just-auto.com/analysis/indias-rising-manufacturing-labour-costs-overtake-china_id106790.aspx "ANALYSIS: India's rising manufacturing labour costs overtake China" Accessed 15 Nov. 2011

⁴ http://www.just-auto.com/analysis/indias-rising-manufacturing-labour-costs-overtake-china_id106790.aspx "Analysis: India's manufacturing labour costs overtake China" Accessed 20 Nov. 2011

⁵ <http://www.kpmg.co.uk/pubs/211786.pdf> "Manufacturing in India: Opportunities, Challenges and Myths" Accessed 16 Nov. 2011

⁶ http://www.businessweek.com/magazine/content/07_15/b4029081.htm "Factories Go South. So Does Pay" Accessed 18 Nov. 2011

⁷ <http://quote.morningstar.com/stock-filing/Annual-Report/2010/12/31/t.aspx?t=XNAS:TSLA&ft=10-K&d=493b0c3e283644b40c3a6c99e264cc11> "XNAS:TSLA Tesla Motors Inc. Annual Report" Accessed 17 Nov. 2011

We believe that India's large and growing workforce population, many of whom can speak English, will benefit us tremendously in terms of cutting down on employment costs. The education system of India is extremely large and caters to millions of citizens. According to our Constitution, education is a fundamental right, which demonstrates the importance of education in India. In recent years, we have been committed to progress. We have increased our primary education and literacy rates to include approximately two-thirds of the population. Additionally, India boasts the third largest number of students in higher education in the world⁸. In 2011, 582,000 engineers and 265,000 polytechnics graduated from college⁹. The high number of college graduates provides a larger pool of skilled and educated workers. This provides us with a very large pool of new graduates whom we could potentially train and employ in our factories each year.

Tesla reported \$84 million in selling, general, and administrative expenses for 2010. Since we cannot pinpoint the allocation of these expenses, we will estimate that their manufacturing employees labor costs accounted for approximately \$14million¹⁰. We expect our international headquarters to be smaller, and thus only have 70 labor employees, with \$462,000 in yearly labor costs.¹¹

We then assume that the \$70 million in other costs can be reduced through India's cheap labor force. Annual salaries for junior resources range from \$5,000 to \$9,000 US dollars while senior resources range from \$17,000-\$40,000. Tesla has 686 non-manufacturing labor employees in the US¹². We also assume the international headquarters will require 200 non-manufacturing labor employees total with 20% being senior resource managers. We then take the high end of the range for the given Indian salaries because our product requires a higher knowledge of skill and knowledge. This means 150 junior resources earning \$9,000 per year with 50 senior resources earning \$40,000 per year.¹³ This results in \$3,350,000 in annual labor costs for Indian workers. We will also add another \$1.5 million on top to compensate US transfer employees who will play a critical role in the total oversight, training, and daily operations in the India headquarters. This results in \$4.85 million in non-manufacturing labor costs.

Historical Trends for Chennai India

⁸ http://digitalcommons.ilr.cornell.edu/cgi/viewcontent.cgi?article=1394&context=key_workplace "Competitive Conditions for Foreign Direct Investment in India" Accessed 14 Nov. 2011

⁹ <http://www.scu.edu/ethics/practicing/focusareas/business/conference/2007/presentations/sheth.html> "Business Ethics in a Global World: India's Changing Ethics" Accessed 14 Nov. 2011

¹⁰ \$70,000 per year x 200 employees

¹¹ 70 employees x \$3.3 per hour x 40 hours per week x 50 weeks= \$462,000

¹² <http://quote.morningstar.com/stock-filing/Annual-Report/2010/12/31/t.aspx?t=XNAS:TSLA&ft=10-K&d=493b0c3e283644b40c3a6c99e264cc11> "XNAS:TSLA Tesla Motors, Inc. Annual Report" Accessed 18 Nov. 2011

¹³ <http://www.sourcingline.com/outsourcing-location/india> "India: Resources and Skills" Accessed 20 Nov. 2011

Major players such as Hyundai, Ford, Nissan and BMW have already established manufacturing plants in Chennai, which is considered by many to quickly becoming the “Detroit” of India.¹⁴ Compared to establishing a manufacturing plant in China, one expert says, “in lower-volume manufacturing where technology use is more intensive, then India is better”.¹⁵ Since Tesla uses proprietary cutting edge technology and is targeted towards more affluent individuals, you fit especially well into the low-volume, technology intensive criteria. Additionally, India’s average return on investment has historically compared favorably to China’s with a five basis point difference at 19%.¹⁶ Both of the following trends largely link back to the high quantity of quality workers in India that attract high-value manufacturers.

Since there are over dozens of major automobile companies with manufacturing plants in Chennai, there are already highly developed trade links to Europe, Africa, and Asia. Although the ports are very congested in India, Indranil Chowdhury of Volvo says “we find that if you have the right clearing agents, you can ship cargo.” By learning from our competitors, Tesla should be able to quickly adapt to navigating India’s export system as well cut costs through accessibility of new component supplier networks.

Tesla will receive benefits from the many factor endowments that the area possesses. Porter’s diamond reveals that being placed in an area with many related industries will result in cost savings and allow us to produce better output.¹⁷ In addition, the rivalry of competing firms will force us to constantly innovate and prevent us from being lulled into stagnation. The supporting factor conditions in India, which consist of over 1500 engineering colleges¹⁸ and a growing working age population, will also allow us a large pool of qualified candidates to select from. The automobile demand conditions will allow us to spot out trends for electric vehicles in less develop countries as well as potentially capitalize on India’s market if we notice an opportunity. According to the OLI framework, all of the aforementioned factors regarding the benefits of Chennai’s location support our decision for a foreign direct investment in India.

Legal Framework

Our government has made it very easy for foreign companies to set up an automotive plant in our country. Industrial licenses are not required and thus there will be no barriers into our market entry. An FDI of 100% is allowed under the automatic route¹⁹ and additional incentives are granted to set up units in certain areas. Since Chennai falls under the Mahindra City area for

¹⁴ <http://www.deccanherald.com/content/137425/chennai-has-emerged-indias-detroit.html> “Chennai has emerged as India’s Detroit” Accessed 20 Nov. 2011

¹⁵ <http://www.kpmg.co.uk/pubs/211786.pdf> “Manufacturing in India: Opportunities, Challenges and Myths” Accessed 15 Nov. 2011

¹⁶ <http://www.kpmg.co.uk/pubs/211786.pdf> “Manufacturing in India: Opportunities, Challenges and Myths” Accessed 16 Nov. 2011

¹⁷ <http://www.quickmba.com/strategy/global/diamond/> “Porter’s Diamond of National Advantage” Accessed 20 Nov. 2011

¹⁸ <http://pib.nic.in/archieve/others/2007/May07/2007050113.pdf> “Science and Technology Education” Accessed 14 Nov. 2011

Special Economic Zones (SEZ), we will be receiving 100% corporate tax exemption for the first 5 years and 50% corporate tax exemption for the next 10 years²⁰. Also, business's investing over Rs 4000 cr over seven years, or approximately \$78 million USD, receive special incentives from the government such as tax cuts, easy land acquisition, and speedy implementation times for projects.²¹

The official business government website of India is very transparent and adamant for their support of investors. They state that, "An effective regulatory and legal framework is indispensable for the proper and sustained growth of the company."²² The Companies Act in 1956 and Companies Bill in 2004 have each been revised numerous times in order to provide clear interpretation for foreign businesses and put in place a legal framework that supports rapid economic growth. Combined with the support of the Securities and Exchange Board of India for foreign investors, India clearly stands out as a country who has one of the best legal frameworks to protect investments, facilitate growth, and support foreign investors.

Threats to Entry

Although the UNCTAD World Investment Prospects Survey 2007-09 deemed India the second most favored FDI destination following China²³, there are still barriers to entry. First, India's infrastructure and poverty pose the biggest threats to entry. Power, road, rail, and port infrastructure are poorly maintained or non-existent, thus raising cost of production and lowering efficiencies. For instance, unreliable power is a common problem in India. "On average a company can expect nearly 17 significant power outages per month, against one per month in Malaysia and fewer than five in China."²⁴ To compensate, many companies incur the cost of maintaining their own private power supplies. In addition to power, transportation is inadequate. Many of the roads are narrow, congested, and poorly maintained. In 2007, only 41% percent of roads were paved²⁵. India's poor infrastructure could affect Tesla's ability to efficiently manufacture and transport automobiles.

Also, bureaucracy and corruption have proven to be problematic while doing business in India. Bureaucracy and corruption hinder FDI by increasing costs of doing business, altering the allocating of resources, and wasting valuable time. Regarding bureaucracy, foreign businesses

¹⁹ <http://www.siamindia.com/upload/AMP.pdf> "Automotive Mission Plan" Accessed 17 Nov. 2011

²⁰

http://www.pwc.com/en_IN/in/publications/assets/SEZinIndia.pdf "SEZs in India: Major Leap Forward" Accessed 14 Nov. 2011

²¹ <http://trak.in/tags/business/2010/11/27/chennai-auto-manufacturing-hub/> "Chennai- Fact Becoming India's Auto Manufacturing Hub!" Accessed 16 Nov. 2011

²² http://business.gov.in/corporate_governance/legal_framework.php "Corporate Governance" Accessed 13 Nov. 2011

²³ "Country Analysis Report: India" Marketline Database. Accessed 15 Nov. 2011

²⁴ http://digitalcommons.ilr.cornell.edu/cgi/viewcontent.cgi?article=1394&context=key_workplace "Competitive Conditions for Foreign Direct Investment in India" Accessed 11 Nov. 2011

²⁵ http://digitalcommons.ilr.cornell.edu/cgi/viewcontent.cgi?article=1394&context=key_workplace "Competitive Conditions for Foreign Direct Investment in India" Accessed 11 Nov. 2011

have reported that investment decisions and approvals by Indian government ministries can drag on for long periods of time for no apparent reason. Additionally, over the past few years, many government officials have been condemned under Indian anti-corruption laws²⁶. According to Transparency International, India is ranked 87 on the Corruption Perceptions Index 2010²⁷. To help you understand the implications of the ranking, the United States is ranked 22nd and Mexico is ranked 98th. To overcome the India's obstacles, we recommend Tesla to locate in a SEZ to avoid issues with infrastructure and unreliable administration and bureaucracies.

Automotive Industry and Regulations

“The auto industry in India has really matured. We are very upbeat about India, because we have been growing fast and we think we will go on growing fast.” -Indranil Chowdhury of Volvo.

India's Automotive Industry has seen great growth in recent years. India's automobile exports totaled \$1.5 billion in 2009. The United States auto component exports to India grew from \$210 million in 2004 to \$437 million in 2009²⁸. These figures demonstrate to Tesla that to facilitate expansion, India has implemented automotive policies that are conducive to foreign investment and Tesla's business objectives. Since 2001, India has reduced import restrictions and opened the market. Also, India implemented the Automotive Policy of 2002. The policy permits 100% foreign ownership of automotive and automotive manufacturing firm without a minimum investment. The policy addresses import tariffs, and India's objective to reduce the high tariffs. In 2003, tariffs were reduced to 30% and in 2005 they were further reduced to 15%. Moreover, in the Automotive Mission Plan 2006 - 2016, the vision statement states “To emerge as the destination of choice in the world for design and manufacture of automobiles and auto components with output reaching a level of \$145 billion accounting for more than 10% of the GDP”²⁹.

As mentioned above, India further caters to the automotive industry through the creation of Special Economic Zones. The SEZ attract foreign investors by offering tax incentives, access to reliable infrastructure, and assisting with bureaucratic and administrative problems.

Economic Fundamentals and Principles

Government/Politics

The government of India is officially know as the Union Government and was established by the Constitution of India. India is home to the world's most populous democracy and remains

²⁶ http://digitalcommons.ilr.cornell.edu/cgi/viewcontent.cgi?article=1394&context=key_workplace “Competitive Conditions for Foreign Direct Investment in India” Accessed 11 Nov. 2011

²⁷ http://www.transparency.org/policy_research/surveys_indices/cpi/2010/results “Corruption Perceptions Index 2010 Result” Accessed 19 Nov. 2011

²⁸ <http://www.oesa.org/Doc-Vault/Presentations/2011/060611-ACMA/Auto-Component-Industry-in-India.pdf> “Auto Component Industry in India” Accessed 11 Nov. 2011

²⁹ http://digitalcommons.ilr.cornell.edu/cgi/viewcontent.cgi?article=1394&context=key_workplace “Competitive Conditions for Foreign Direct Investment in India” Accessed 12 Nov. 2011

committed to the principles of democracy and rule of law³⁰. The political stability of a democracy creates an atmosphere that is conducive to investment, thus eliminating political risk. Although, India's government promotes democratic ideals, there are still a few issues the government needs to address.

Economic issues that stem from government policy or lack of policy are problematic. For instance, India has little infrastructure, which is needed for long-term investments³¹. Also, corruption and bribery are common practice in the Indian government. The high amount of corruption can increase the cost of doing business and instill mistrust of government officials.

Economy and Financial System

Since the liberalization reforms in 1991, Indian has experienced exponential economic growth. By 2006, India's growth rate in terms of GDP was 9.2%, second to China. Also, India experienced rapid growth in trade, especially in the manufacturing and service industries. From 1995 to 2005, total merchandise trade and imports of services almost tripled, and exports of services quadrupled³². During the deregulation, the economic policy transformed from extremely restrictive to moderately liberal. The new economic regime encourages FDI in almost all economic activities and provides a variety of incentives for foreign investors. Additionally, second generation reforms are aiming to further integrate Indian economy with global economy³³. India's new economic policies and accelerated growth provide an ideal environment for Tesla's objective.

In recent years, India's financial system has proved to be sound. For instance, during the U.S. economic crisis of 2008, the central bank of India remained relatively unaffected. "India's banks and financial institutions have not experienced the kinds of losses and write downs that even venerable banks and financial institutions in the Western world have faced." ³⁴During the deregulation in the 1990s, we restructured our financial system, resulting in a stable and reliable financial system. In regards to the banking system, Indian banks are owned by the public sector (e.g. state and institution owned banks). The public owned banks create a greater feeling of among our depositors. Our financial system has been deemed "wise," yet there is still criticism. Although we are deregulating our investment policies, many countries, such as the U.S., believe we are moving too slow and not taking enough risks³⁵.

Exchange Rates

³⁰ <http://www.fas.org/sgp/crs/row/RL34161.pdf> "India-U.S. Economic and Trade Relations" Accessed 12 Nov. 2011

³¹ <http://www.fas.org/sgp/crs/row/RL34161.pdf> "India-U.S. Economic and Trade Relations" Accessed 10 Nov. 2011

³² <http://www.fas.org/sgp/crs/row/RL34161.pdf> "India-U.S. Economic and Trade Relations" Accessed 10 Nov. 2011

³³ http://dipp.nic.in/manual/manual_0403.pdf "Manual on Foreign Direct Investment in India" Accessed 15 Nov. 2011

³⁴ <http://www.fas.org/sgp/crs/row/RL34161.pdf> "India-U.S. Economic and Trade Relations" Accessed 10 Nov. 2011

³⁵ <http://www.fas.org/sgp/crs/row/RL34161.pdf> "India-U.S. Economic and Trade Relations" Accessed 10 Nov. 2011

India’s exchange rate regime with respect to most foreign currencies is floating. However, the U.S. dollar and Indian rupee exchange rate regime is categorized as a “managed float”³⁶. A managed float reduces currency value fluctuations and transaction costs. Due to the changing nature of the market, Tesla will inevitably incur transaction costs when transferring profits to the United States. The transaction costs are a result of market shifts and exchange rate fluctuations. Even the smallest change will create transaction costs because a dollar today is not the same as a dollar tomorrow. Figure 1 lists the USD/IND exchange rates from 2006-10.

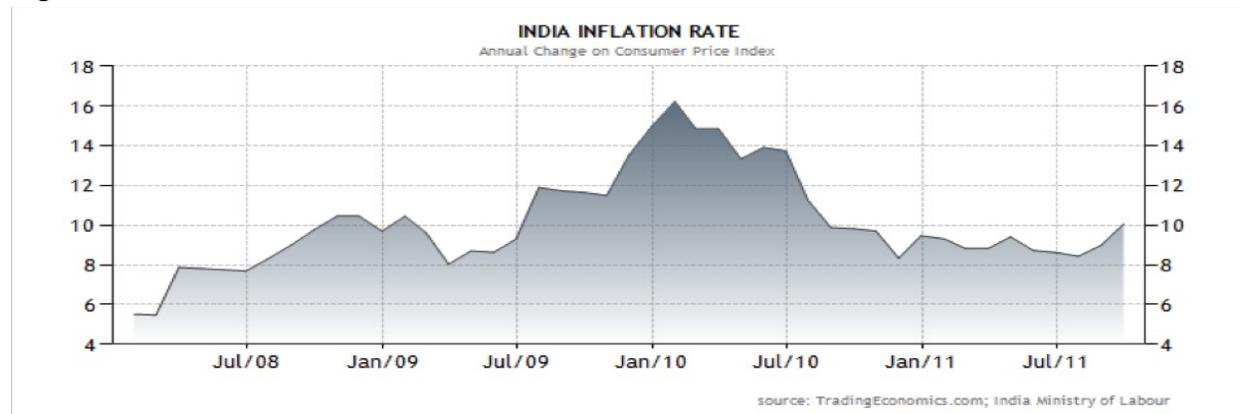
Figure 1

Table 28: Indian exchange rate, 2006-10	
Year	Exchange rate (\$/Rs.)
2006	45.3188
2007	41.3570
2008	43.8145
2009	48.8500
2010	45.9361

Source: Datamonitor

Over the years, India has encountered high inflation. For example, in November 2010 and September 2011, the inflation rates were 8.6% and 10.06%, respectively. Additionally, the inflation rates have proven to be unstable. Figure 2 demonstrates the volatility of the Indian inflation rate.

Figure 2



³⁶ <http://icrier.org/pdf/wp108.pdf> “India’s Policy Stance on Reserves and the Currency” Accessed 15 Nov. 2011

Initially, the high inflation rates will make India an ideal location for Tesla. The India rupee depreciates with inflation causing the U.S. dollar to appreciate, meaning the U.S. dollar has greater value in the Indian economy. This will reduce Tesla's initial costs because investing in India will be cost effective. However, high inflation rates are not conducive to foreign long-term investment. If inflation continues to increase, the value of the Indian rupee will decrease, resulting in lower returns for your company³⁷. Fortunately, the Indian government is working to alleviate the inflation rates in the future, which will be advantageous for Tesla's long term profits³⁸. In regards to the volatility, the unstable exchange rates cause uncertainty, however the fluctuations are not large enough to impede Tesla from entering India.

US/Indian Trade Relations

The United States is one of India's leading trade partners. India's exports to U.S. have increased dramatically. The value of these exports has more than doubled from \$9.3 billion in 2000 to \$18.7 billion in 2005. U.S. exports to India in 2007 totaled \$17.5 billion, a 75% increase from the year before. India and the United States have recognized the mutual benefits of working together and are committed to improving trade relations. Since 2004, they have formed a "strategic partnership" based on similar values and overlapping interests. From 2000 to 2006, India's total trade with the United States increased from \$12.2 billion to \$28.6 billion³⁹. In 2006, the U.S. President Bush and Indian Prime Minister Singh agreed to combine efforts to double bilateral trade agreements in three years. Since Bush, President Obama has continued to cultivate relations with Singh. In 2010, Obama and Singh signed numerous trade and defense agreements. The trade agreements were signed to facilitate business developments in India⁴⁰. The positive trade relations between the United States and Indian will foster a healthy business environment that is conducive to Tesla's company strategy.

Culture

India is a very diverse nation and is host to hundreds of different ethnic groups, religious sectors, races, and social castes. We have 21 official languages including: Hindu, Urdu, Tamil, and English⁴¹. To Tesla's advantage, English is the official language of business⁴². Also, English is the primary language of instruction in institutions of higher education. This means that most educated

³⁷ http://articles.timesofindia.indiatimes.com/2011-07-27/pune/29819875_1_repo-rate-lending-and-borrowing-rate-s-basis-points Rate "Rate hike Harsh on Realty: Experts" Accessed 11 Nov. 2011

³⁸ <http://search.proquest.com.proxy.lib.umich.edu/abidateline/docview/761421104/132F06B0B6F77095AE0/2?accountid=14667> "India Hikes Interest Rates to Check Inflation" Accessed 13 Nov. 2011

³⁹ <http://www.fas.org/sgp/crs/row/RL34161.pdf> "India-U.S. Economic and Trade Relations" Accessed 12 Nov. 2011

⁴⁰ http://en.wikipedia.org/wiki/Foreign_relations_of_India#Indo-USA_strategic_partnership "Indo-USA Strategic Partnership" Accessed 14 Nov. 2011

⁴¹ http://www.communicaid.com/cross-cultural-training/culture-for-business-and-management/doing-business-in/Indian_business_culture.php "Indian Business Culture" Accessed 14 Nov. 2011

⁴² <http://search.proquest.com.proxy.lib.umich.edu/abiglobal/docview/231348092/132EBD12233587F2195/1?accountid=14667> "Tapping into India's Automotive industry" Accessed 13 Nov. 2011

Indian workers will be proficient in English, thus breaking the language barrier between Tesla's U.S. and Indian employees.

The business culture of India is quite different than the United States. The Indian way of life and work are often interwoven. Religion, fatalism or "karma", and collectivism are central to the Indian culture inside and outside the workplace. Collectivism or a strong sense of community will have the greatest implications on Tesla's business. Friendship or clanship is highly valued, which is contrary to the U.S. emphasis on the individual. This group dynamic creates a greater acceptance of hierarchical settings, thus influencing the management style⁴³. In most companies, the most senior executives make decisions in a non-participatory way. So, even if an executive makes an incorrect order or decision, the employees listen without opposition. Knowing this information, we recommend Tesla place special attention on the hiring process of the future manager.

When hiring the Head of International Operations in India, the first consideration is whether to hire local or within Tesla. There are advantages and disadvantages in both cases. An Indian manager will understand the local culture, policies, and language, thus making him or her a valuable asset to Tesla. However, a local manager may not uphold or follow Tesla's business vision and strategies. On the other hand, a Tesla manager would understand the inner workings of Tesla operations and act as a liaison between the U.S. and India. Yet, installing a U.S. manager may result in conflict between Indian employees and management. Since this is your first installation of a foreign manufacturing operation, we recommend employing a U.S. manager. With a U.S. manager, Tesla will have tighter control of quality control, R&D, and company transactions. Additionally, since the headquarters in Chennai would concentrate on operations, local know-how is not as advantageous as it would be for marketing. Furthermore, we encourage employing a candidate that has demonstrated great personal ethics, so he or she can lead by example and create a productive and ethical organization culture.

Ethical Considerations

As mentioned before, corruption and bribery are common practice in India. The U.S. Foreign Corrupt Practices Act (FCPA) has outlawed bribes to foreign government officials in order to gain business. We suggest that Tesla should adapt a zero tolerance policy, similar to BP⁴⁴. This will produce an ethical organization culture, and protect Tesla's global reputation. To further promote high ethical standards we recommend implementing a Code of Conduct. The Code of Conduct would include a decision making process to ensure all company decision are ethical.

The launch of our manufacturing plant has certain ethical and unethical aspects involved as well. The Kant view would believe that we are using low-wage workers as a means to achieve greater profitability and thus qualify our decision as unethical. On the other hand, it can be seen under the Utilitarian view that our plant will create jobs for Indian workers and help boost the GDP

⁴³http://www.communicaid.com/cross-cultural-training/culture-for-business-and-management/doing-business-in/Indian_business_culture.php "Indian Business Culture" Accessed 13 Nov. 2011

⁴⁴ Hill, Charles W. "Ethics in International Business" *International Business*. 2010

as something that could potentially outweigh the costs of our business, primarily pollution. Since we are paying our workers a fair wage and will not be emitting excessive amounts of fuel relative to other businesses, there should be little media back lash in regards to our ethics, despite not necessarily passing the tests in the Kant and Utilitarian perspective.

Financing Expansion into India

In March 2007, BMW began production at their automobile manufacturing plant in Chennai, India with an initial capacity of 3,000 cars per year⁴⁵. They initially invested approximately US \$22 million dollars into the facility and have since expanded their facilities to accommodate for production capacity of 11,000 cars⁴⁶. Due to their high recent sales in the Indian market and their bullish outlook on future domestic sales, BMW will be building an extension to their current plant in order to achieve higher production capabilities. As a result, BMW has agreed to sell us the original portion of their manufacturing plant which we will use as our international headquarters.

The initial factory, which BMW invested \$22 million, has since depreciated over the course of its life to \$14 million.⁴⁷ BMW is also planning on moving \$4 million dollars worth of equipment to the new sector of their plant and thus have agreed to a potential sale price with us of \$10 million dollars.

Assuming a \$2 million dollar down payment on the project and a required return rate of 10%⁴⁸ our annual payments thereafter are approximately \$2.1 million each year for 10 years, starting a year after purchase⁴⁹.

Although BMW has has agreed to sell us a portion of their left over equipment, we estimate that renovations, building a wall separating the two companies, transfer of operating permits, transfer of emission credits, and buying new assembly equipment will cost us an additional \$8 million dollars. We will be able to finance this through the money remaining from our June 2010 IPO that netted us \$184.5 million.

Motives for Expansion into Singapore

⁴⁵ http://www.bmw.in/in/en/_teaserpool/download/insights/pdf/BMW_India_Company_Profile.pdf “BMW India”

⁴⁶ <http://online.wsj.com/article/SB10001424053111904875404576530002968631030.html> “BMW Raises India Factory Output”

⁴⁷ Valued using straight line depreciation method with a deprecation rate of \$2 million per year over the course of 11 years and no salvage value. Since the factory has been in operation for 4 years, the cost of acquiring the land, factory, and equipment would be \$14 million [$\$22 \text{ million} - (\$2 \text{ million} \times 4 \text{ years})$]

⁴⁸ In both our negotiations with BMW and our own projected calculations, we have decided to use a required return rate of 10%, rounded up from 9.8% which is the historical average for the S and P 500#.

⁴⁹ $R, P = (R/i) (1+i)^{-t}$, we get $8,000,000 = (R/.1) (1.1)^{-10}$, or $R = 2,074,993.968$. We will round these yearly payments up to \$2.1 million.

Singapore has the world's highest percentage of millionaire households, with 15.5 percent of all households owning at least one million US dollars. These high-income households are the target consumers for the Tesla Roadster. Furthermore this consumer base is also very concentrated due to the population density of Singapore, which allow for cost efficient marketing. For example, billboards would have greater reach and word of mouth travels much faster in such a dense population.

Singapore is the crossroad of businesses worldwide which serve as an excellent location to raise Tesla's international brand equity. Executives on their business trip would recognize the brand and carry a positive word of mouth back home to their respective country about the Tesla Roadster where demand would follow. This would be the ideal outcome for international marketing.

Automotive Industry and Regulations

Singapore's auto industry is one of the largest and most sophisticated in Asia. It is considered one of the "cleanest and greenest" countries with one of the highest standards of living in the area. This is due to a highly industrialized business sector, multinational companies, excellent port facilities and land communication systems, as well as airports and sea links connecting the country to the entire world.⁵⁰ Located at the crossroads of international shipping and air routes, Singapore has a very strategic location on major sea-lanes.⁵¹ Basically, it is the center for transportation and communication in Southeast Asia.

Automotive Industry

The per capita car ownership rate in Singapore is 12 cars per 100 people. This is small compared to that of the United States, at approximately 78 cars per 100 people.⁵² However, Singapore's passenger car market and sales have been on the rise, as seen in Figure 3.⁵³

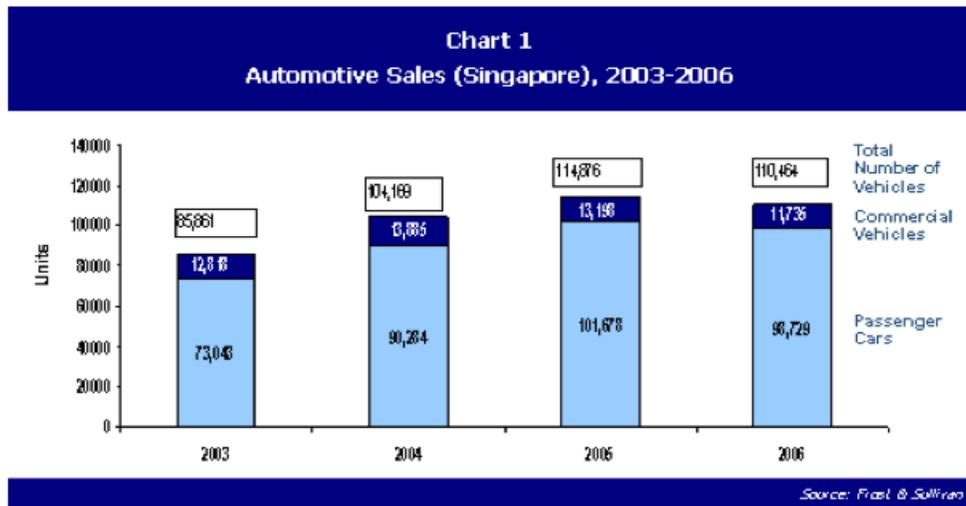
Figure 3

⁵⁰ Automotive Industry in Singapore, <http://www.abcarticledirectory.com/Article/Automotive-Industry-In-Singapore/84713> accessed 8 Nov 2011.

⁵¹ Singapore Economy, <http://www.traveldocs.com/sg/economy.htm>, Accessed 8 Nov 2011.

⁵²<http://www.houstontomorrow.org/livability/story/us-car-ownership-rate-may-be-at-its-peak/>, "US Car Ownership Rate May Be At Its Peak" Accessed 8 Nov 2011

⁵³http://www.frost.com/prod/servlet/market-insight-top.pag?docid=11_0053988, "Singapore Automotive Market: An Analysis" Accessed 10 Nov 2011.



Source: Frost and Sullivan

Since Singapore is also very environmentally conscious and mainly composed of urban drivers with lesser driver range (due to the size of the city-state), it will likely prove as a feasible market for electric vehicles in coming years.

Currently, Japanese car manufacturers have the largest market share in Singapore.⁵⁴ Japanese cars tend to be more environmentally friendly and smaller in size than most, making them very desirable vehicles in Singapore. Our Roadster is similar in that it is an electric vehicle, but it's differentiated in the fact that it is a high-performance sports vehicle, making us appeal to more high-end consumers.

Automotive Regulations

As previously addressed, the Singaporean government places a 100% tax on car imports into Singapore, which we hope to reduce by negotiating a green tax incentive due to the fact that our Roadster is extremely environmentally friendly. The Special Green Vehicle Rebate provides buyers of electric vehicles with a discount of up to 40%.⁵⁵ This rebate reduces the price of cars by a substantial amount for customers and gives them a huge incentive to buy our electric vehicles.

There are a number of vehicle exhaust emission standards in Singapore, established by The Pollution Control Department (PCD) of the Ministry of the Environment.⁵⁶ Fortunately, electric cars don't emit CO₂ and thereby our Roadster has already met these standards. In terms of the

⁵⁴ http://en.wikipedia.org/wiki/Driving_in_Singapore, "Driving in Singapore" accessed 8 Nov 2011

⁵⁵ <http://www.internationalcleantechnetwork.com/media/11164/icn%20international%20ev%20study.pdf> "New International Study: Electric Vehicles Ready to Enter the Market but Significant Barriers still block the Road" accessed 13 Nov 2011

⁵⁶ <http://www.dieselnet.com/standards/sg/> "New Vehicle and Engine Regulations" Accessed 14 Nov 2011

possible hazardous material within an electric vehicle's battery, the Tesla Motors Lithium-Ion cells are not hazardous and are landfill safe. The battery packs can also be sold to recycling companies to be recycled at the end of its +100,000-mile lifespan.⁵⁷

The Land Transport Authority, a department of the Singapore government, is making measures to reduce the amount of vehicle use in the country. These regulations that are designed to limit car ownership include the need for a Certificate of Entitlement (COE), which is an expensive certificate with its price based on engine size, sometimes as much as \$60,000. Singaporeans bid for the right to own a motor vehicle, and if granted a COE, are allowed to own a car for 10 years, after which they would have to bid for another COE. Since the Tesla Roadster is a luxury vehicle, it appeals to the wealthier residents of Singapore who probably don't mind paying this fee, since they would most likely already own a car.⁵⁸

Although the Singaporean government places restrictive measures to reduce the number of vehicles on Singapore's roads, we strongly feel that Tesla could overcome these limits and become a very desirable possession for wealthy Singapore residents.

Economic Fundamentals and Principles

The economy of Singapore is a mixed economy known as the Singapore Model. The Singapore Model strongly advocates free market policies and practices, but involves ample government intervention. This is due to the fact that Singapore has a relatively small domestic market and therefore has to open itself to external markets in order for the economy to thrive. The purpose of Singapore's government intervention is to safeguard the country from fluctuations in the global market.⁵⁹ While government intervention might make managing a hassle, it demonstrates that Singapore is stable and open to foreign markets, and would undoubtedly welcome our appearance. Singapore's corrupt-free government, advanced infrastructure, and skilled labor force has attracted over 7,000 multinational investments from the United States, Europe, and Japan.⁶⁰ This means by investing in Singapore we would be entering a highly developed, non-corrupt, and well-structured investment world, guaranteeing stability and success.

Since Singapore is very welcoming to external markets, we would recommend Tesla invest in a showcase store for direct sales, marketing, public relations, and services. We would not recommend more than one store since Singapore is a city-state with expensive land, and we are only targeting a specific market; also, most purchases are made online and shipped in. However, if the market proves to be lucrative, additional stores can always be opened.

⁵⁷ <http://www.teslamotors.com/blog/secret-tesla-motors-master-plan-just-between-you-and-me> "The Secret Tesla Motors Master Plan (between you and me)" Accessed 16 Nov 2011

⁵⁸ <http://www.expatsingapore.com/content/view/1152> "Once You're Here: Cost of Owning a Car" Accessed 18 Nov 2011

⁵⁹ http://www.economywatch.com/world_economy/singapore/?page=full "Singapore Economy" Accessed 15 Nov 2011

⁶⁰ <http://www.traveldocs.com/sg/economy.htm>, "Singapore Economy" Accessed 8 Nov 2011.

Analysis of Ownership, Location, and Internalization

In terms of Dunning's OLI framework, we should not license, but instead own our own store in order to keep an owners advantage, since we don't want our trade or marketing secrets to leak out. The location advantage of Singapore has already been addressed; it is the center for transportation and communication in Southeast Asia and therefore an excellent market to enter. It is also much closer to India than the United States, thus reducing transportation costs by shipping to Singapore from India. Singapore also has a skilled, cheap labor force, which will reduce our costs and needs to train employees. Internalization (selling directly from Singapore as opposed to only online/from abroad) provides another way to reduce potential technological leakage. It also reduces potential for conflicts of interest and gives us an actual physical presence for our customers, as people would be able to walk by our storefronts and see our cars, as well as test-drive our cars.

Exchange Rate

The Monetary Authority of Singapore (MAS) manages Singapore's managed float exchange rate. It manages the Singapore dollar (S\$) exchange rate to prevent extreme fluctuations by maintaining it within an undisclosed target band. The Singapore dollar is allowed to appreciate and depreciate on factors such as world inflation and domestic price pressures. This means that its value changes with the world market, and in turn is the safest type of exchange rate to have to do business with.⁶¹

Since 1981, the Singapore dollar has been appreciating against the US dollar, as seen in Figure 4 below. While this means it would cost us more to invest now than before it would have before, it is one of our more inexpensive markets, compared to those we have entered in Europe. Figure 4 also shows how the Singaporean economy is growing steadily, indicating it is a financially stable market to enter.

Figure 4: Comparison of Singapore's GDP and Exchange Rate

⁶¹ http://www.sgs.gov.sg/macro_overview/macrooverview_mone.html "Monetary Policy" Accessed 17 Nov 2011

Year	Gross Domestic Product (\$ millions)	US Dollar Exchange	Nominal Per Capita GDP (as % of USA)	PPP Per Capita GDP (as % of USA)
1980	25,117	2.14 Singapore Dollars	39.65	55.00
1985	39,036	2.20 Singapore Dollars	36.63	63.41
1990	66,778	1.81 Singapore Dollars	52.09	74.76
1995	119,470	1.41 Singapore Dollars	86.14	90.60
2000	159,840	1.72 Singapore Dollars	66.19	91.48
2005	194,360	1.64 Singapore Dollars	67.54	103.03
2007	224,412	1.42 Singapore Dollars	74.61	107.92
2008	235,632	1.37 Singapore Dollars	73.71	107.27
2009	268,900	1.50 Singapore Dollars	78.53	108.33
2010	309,400	1.32 Singapore Dollars	82.13	119.54

Source: <http://www.imf.org/external/pubs/ft/weo/2006/01/data/dbcselem.cfm?G=2001> “World Economic Outlook”.

Trade with the United States

Currently, the US is Singapore’s largest source of foreign investments, with over 1,500 US firms operating in Singapore, accounting for 11.2% of new foreign investments in the manufacturing sector in 2008.⁶² Singapore is also among the 15th largest trading partners of the US. Within the last year, US trade with Singapore has also been on a rise as seen in Figure 5 below. In 2003, the United States signed the US-Singapore Free Trade Agreement, which lowered tariffs and fostered a deepening of the bilateral relationship.⁶³ This is beneficial to Tesla in the sense that US-Singapore trade is in good standing and planning on improving. Therefore, you won’t have to worry about the development of poor trade relationships.

Figure 5

⁶² <http://www.state.gov/r/pa/ei/bgn/2798.htm> “Background Note: Singapore,” Accessed 14 Nov 2011

⁶³ <http://www.ustr.gov/trade-agreements/free-trade-agreements/singapore-fta> “Singapore FTA” Accessed 14 Nov 2011

2011 : U.S. trade in goods with Singapore

NOTE: All figures are in millions of U.S. dollars on a nominal basis, not seasonally adjusted unless otherwise specified. Details may not equal totals due to rounding.

Month	Exports	Imports	Balance
January 2011	2,307.6	1,535.0	772.6
February 2011	2,284.1	1,506.1	778.0
March 2011	2,453.9	1,522.0	931.9
April 2011	2,739.9	1,572.8	1,167.1
May 2011	2,575.8	1,752.2	823.5
June 2011	2,637.6	1,613.5	1,024.1
July 2011	2,856.9	1,673.4	1,183.4
August 2011	2,871.8	1,883.4	988.4
September 2011	2,866.3	1,541.8	1,324.6
TOTAL 2011	23,593.9	14,600.2	8,993.7

Source: <http://www.census.gov/foreign-trade/balance/c5590.html> "Trade in Goods with Singapore".

Culture

The four official languages of Singapore are Mandarin, Malay, Tamil and English.⁶⁴ It would be good practice if we could adopt a native speaker of each language in our Sales offices so we can appeal on a more personal level with our potential customers. This would make developing rapport with our customers easier and hopefully result in greater sales figures. Singapore also has a large blend of people from Malay, Chinese, Indian, and European descent. To adapt to the wide array of cultures in the area, we will prepare a report for our sales team that covers the main cultural differences of potential customers and gestures that could possibly be determined as offensive. We believe that Tesla can maximize sales and avoid cultural miscommunication through these two policies.

Ethical Considerations

Our ultimate reason and end goal for choosing to market in Singapore comes down to profitability. We would be acting unethically under the Kantian view because we are ultimately using the wealthy members of Singapore as a means to an end. However, under the Kantian view, nearly all businesses with the exception of non-profits can be argued as being unethical. While businesses can strive to promote environmental causes or support human rights movements, ultimately no business can exist without achieving profits. Therefore, I believe the best metric to judge the ethics of our decision to enter Singapore would be the Utilitarian viewpoint. Under Utilitarian ethics, which state that consequences determine the moral worth of our actions, our electric vehicles provide an extremely valuable social benefit to the country. The sales of our vehicles and their use will reduce carbon emissions and help decrease smog in a country that ranks

⁶⁴ <http://www.singaporeexpats.com/about-singapore/culture-and-language.htm> "Singapore Culture" Accessed 21 Nov 2011

6th in the world for tons of carbon per person.⁶⁵ We are also marketing our vehicles towards the wealthy, so the costs of our business decision are minimal in terms of reducing the quality of lives for our customers. Since the environmental benefits we provide their society greatly outweigh the costs of the profits we receive from their wealthy consumers, our decision to launch a sales effort in Singapore is very ethical under the Utilitarian viewpoint.

EV Test Beds

Singapore launched its electric vehicle test-bed in June 2011 to decide whether it is feasible for mass adoption. Chee Hong Tat, chief executive of the Energy Market Authority (EMA), is optimistic about the EV test-bed as it could help Singapore “push towards a cleaner, greener and more sustainable transport system, and a better living environment.” To make this test successful, they are inviting the private sector players to participate in the development and testing process. This is an opportunity for Tesla to introduce the Roadster to Singapore as well as build brand equity through the media coverage. Furthermore, the participants are exempt from vehicle taxes, road tax, and excise duty for the purpose of research and development. The tax waiver will last for an initial period of six years. This is an incentive to encourage more participation from companies interested in helping Singapore achieve a better living environment through green technology.⁶⁶

Financing the Expansion into Singapore

The majority of your orders are made via website or by phone so the cost of capital to enter Singapore is very small. However, it would be beneficial to set up a few stores/showrooms for direct sales if this market proves to be profitable. Base on your 10-k, it seems like you are more than capable of opening at least one store in Singapore using the cash on hand. Loans and IPO's are not necessary for the expansion into Singapore.

We do not want you to put out substantial investments until we can be sure that Singapore is a place where your marketing effort pays off, therefore we finance the expansion first an investment in market assessment, which you are currently doing by hiring us. The next step is e-marketing to leverage search engine optimization and search engine marketing to increase visibility. The cost of both is fairly low. If there is potential, then brand building is the next step, which is more costly. A showcase store/office with a sales force and managers is needed in order to effectively develop Tesla's brand through advertising and public relations in order to create customer relationships and encourage positive word of mouth. Taking into consideration the land and building costs, as well as taxes and overhead, the annual costs would fall within the range of \$1.3 to \$2 million with a \$4 to \$6 million initial investment. We estimate the unit sales of the Tesla Roadster to be 70 cars per year with the tax exemption and 55 cars with tax incentive (40% rebate). Depending on whether you can obtain a tax exemption or just a tax incentive, Tesla will break even in 3.5 years and 5 years respectively, assuming consistent sales number for the Roadster and a

⁶⁵ <http://www.aneki.com/polluted.html> Accessed 21 Nov 2011

⁶⁶ <http://www.lta.gov.sg/images/EV%20Factsheet%20.pdf> “FACTSHEET ON ELECTRIC VEHICLES” Accessed 5 Nov 2011

20% profit margin. If we incorporate the sales of the Model S, starting in mid 2012, we expect the break-even point to be lower and Tesla to start seeing profits in the Singapore market by the end of 2015.

Porter's 5-Force Analysis

Barriers to Entry

Cultural differences have a significant influence in the way that we market our product and can be a major obstacle to your entry. The Singaporean consumers are very skeptical to embrace new technology especially in terms of automotive application. They are highly selective due to the high cost of owning a vehicle in Singapore because of all the taxes and license costs. To overcome this barrier, we must positively shape their preference and attitudes towards high end electric to justify the high investment. Government support is crucial in doing so. Luckily, the government of Singapore is pushing towards greener technology such as electric vehicles by offering green incentive taxes and launching the EV test-beds. We believe the EV test-beds will be successful, initiating the next generation of energy efficient vehicles in Singapore. Therefore, the threat to entry is moderate.

Competition

The competitive environment in Singapore is similar to that of the United States with the major players being Toyota Motor Corporation, Honda Motor Co., Ltd., Hyundai Motor Co., and Kia Motors Corporation⁶⁷. They are competitors in the aspect that they all offer at least one type of energy efficient cars, whether it is hybrid or electric. Tesla is further differentiated by being a high performance electric car with a higher price tag, but this in turn creates more competition for Tesla as they are now also competing with sports cars like Ferrari and Porsche. The biggest advantage the competitors have over Tesla is brand recognition. Consumers do not simply spend over \$110,000 on a car they never heard of. We evaluate the threat of competition to be high.

Buyer Power

Since the Tesla Roadster is considered a luxury good, the demand is very inelastic so consumers are willingly to pay the high price. Furthermore, there is no similar class of car like the Roadster so there is no basis for the consumer to negotiate with. Unless they buy in mass quantities, the buyer power is low.

Supplier Power

The major supplier in this case is human capital. Motivated sales people and managers are crucial for effective marketing. They affect the success of Tesla in Singapore. Sales people can be trained, but a good sales manager is hard to come by. Assuming that the Singapore market is successful, the manager would have high bargaining power later on but for now it is low.

⁶⁷<http://www.frost.com/c/10046/sublib/display-report.do?ctxixpLink=FcmCtx7&searchQuery=APAC+EV&bdata=aHR0cHM6Ly93d3cuZnJvc3QuY29tL3NyY2gvY2F0YWxvZy1zZWZyY2guZG8%2FcXVlcnlUZXh0PUFQQUMrRVZAfkBTZWFyY2ggUmVzdWx0c0B%2BQDEzMjE1NzY1OTk1NjQ%3D&ctxixpLabel=FcmCtx8&id=P29A-01-00-00> "EV in APAC" Accessed 7 Nov 2011

Substitutes

An alternative to Electric vehicles can be hybrid vehicles or even public transportation in the broad sense of environmental friendly transport. In terms of an electric sports car, there are no substitutes. It highly depends on your qualification for viable substitutes. We came to the conclusion that the threat level for substitutes is moderate due to the likelihood that your high end consumer base demands personal vehicle over public transportation.

Recommendations

India-Recommendation for operational expansion

Based by on your financial report, we noted Tesla has sufficient savings to invest in an acquisition of BMW's manufacturing plant in Chennai, India. We believe this is the fastest way and most cost effective way to start up our production abroad of the Tesla Roadster as well as the Model S early 2012. We recommend Tesla purchases BMW's manufacturing plant for NPV \$10 million, which can be financed over the course of ten years. The manufacturing plant will operate as Tesla's international headquarter where it will serve as a central distribution center for our shipments to Asian, African, and European markets. Purchase of the plant will allow you to take immediate advantage of being placed into an Special Economic Zone (SEZ) where we can avoid certain risks associated with entry and quickly begin production of our vehicles overseas. The proposed agreement in place with BMW will meet our target required return rate and provide us with a projected net present value of \$5.7 million (please see attached excel spreadsheet and appendix for details). We should make this purchase swiftly to start receiving the immediate benefits of reduced operating costs.

In regards to hiring our Head of International Operations, the higher up positions such as VP of manufacturing and VP of research and development, we recommend promoting from within Tesla to ensure that we can maintain our strategic vision and consistent operating procedures. To address the cultural differences, we suggest hiring seasoned managers from within India to oversee the work of local manufacturing laborers and serve as a connection between laborers and the executives.

Singapore- Recommendation for marketing expansion

We highly recommend using the EV test beds as an entry method because the tax waiver would significantly lower the price of the Roadster to around \$110,000 as opposed to \$220,000. This would make it more accessible and appealing to the target consumers. With a \$220,000 price tag, the threat of substitutes and competition are much higher. At that price you are competing with Ferrari and Porsche, who have much higher brand recognition in Singapore than Tesla. It is crucial for Tesla to have a price advantage to be competitive given your lower brand recognition. It is also a strategic move to increase brand equity through media coverage and government support. The media and government of Singapore have a strong influence over its citizens and will have an important role in the success of Tesla in Singapore. The EV test beds is an opportunity for Tesla to demonstrate its willingness to help Singapore achieve a greener tomorrow and develop a network of supporters to propel Tesla through Singapore's tough automotive market.

After the initial effort to promote Tesla through the EV test beds, the next step is to open up an office/showroom in Singapore with a mechanics, sales force, and managers directly in charge of servicing, public relations, and marketing. This store is wholly owned like any other Tesla showrooms, however it is important for the manager to understand Singapore's culture to effectively market to target consumers, establish relationships with consumers, and train the sales force. The manager should be hire locally, someone who really knows how to navigate the Singapore market and understand the consumers.

This initial investment would cost approximately \$5 million, which includes the cost of land, building, licenses, and taxes. Annual costs would be higher in the beginning because of the initial amount of marketing and that comes to about \$2 million. The projected sales of the Tesla Roadster and Model have a growth rate of 3% and 7% respectively. These are conservative numbers and could change depending on our marketing efforts. Tesla should achieve a net present value by the end of 2015.

Appendix

Financial Model Assumptions and Calculations

We used \$110,000 for our price of Roasters and \$60,000 for our model S price.

Revenues from India Sales

We do not have a marketing plan in place for India or intend to immediately start selling vehicles. We do plan to start selling automobile vehicles in India starting in 2016, after the AMP agreement is completed and the countries infrastructure has improved. At the moment, we plan on selling these vehicles through online orders, and thus do not incur any additional costs.

We estimate they will sell 10 Roadsters in 2016, increasing by 10% per year.
We estimate they will sell 50 Model S, increasing by 20% per year.

Revenues from Singapore Sales

Although there is a 100% tax rate on vehicles imported into Singapore, we add this completely onto our car sales price, thus not affecting our profit per car. So we essentially ignore this tax in our financial report since the additional amount we earn in revenue, immediately gets deducted as a cost.

Roadster 35 cars increasing by 3% each year over the span of 10 yrs.

For the Model S, 110 cars increasing by 7% each year over the span of 10 yrs starting in mid 2012.

Revenue from rest of Asia, Africa, and Europe

Although we currently sell to these markets, we will count our cost savings from delivering cars with a closer production facility to be revenue when determining the NPV of this decision.

We estimate a savings of \$200,000 dollars a year with a growth rate of 9%

Additional Revenues from rest of AAE sales

We expect additional sales to these markets of \$25 million per year with a 10% increase.

Cost of Labor

See calculations in article

Cost of Factory Automotive Sales

We factored in costs as 80% of sales. This is reasonable based on the financial reports from Tesla's annual report which reported approximately \$97 million in annual sales with costs of \$86 million for 2010. The lower cost of sales can be attributed from cost savings in India.

Building payment

We used \$2 million annual, based on calculations from earlier.

Depreciation

We used straight line depreciation of \$1 million dollars per year.

Income tax

The effective foreign corporate tax rate in India is 42.23%⁶⁸

SEZ's in India have a 100% corporate tax exemption for first 5 years. 50% corporate tax exemption for the next 10 years.

Capital Expenditure

Based on calculations made earlier, we came up with an initial investment cost of \$10 million.

Discount Factor

⁶⁸ http://www.investindia.gov.in/e&y_doing_business_india.pdf "Doing Business in India" Accessed 19 Nov 2011

In both our negotiations with BMW and our own projected calculations, we have decided to use a required return rate of 10%, rounded up from 9.8% which is the historical average for the S and P 500⁶⁹.

⁶⁹ <http://money.cnn.com/magazines/moneymag/money101/lesson4/index.htm> "Investing Basics" Accessed Nov 20 2011