**Analysis of Tesla’s Sales Performance**

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Abstract

The case study from March, 2015 written by Frank T. and David R. addresses the success and the future possible speculations about Tesla Motors. With the increasing competition in the production of electric cars, Elon Musk, the CEO of Tesla, has been trying to figure out the factors that affected the sales performance of Tesla, in the past few years. The goal of this project is to analyze what variables are potential to affect the sales performance of Tesla cars. We have collected the historical data for oil prices, stock prices, prices of other electric cars in the market and many more, in order to analyze the correlation among these factors. Further, we build a multiple linear regression model on Tesla’s sales and oil prices as well as test the hypothesis we have claimed.

Keywords: normalization, regression analysis, correlation analysis

Analysis of Tesla’s Sales Performance

Elon Musk is a very successful entrepreneur and has stake at three firms SolarCity, SpaceX and Tesla Motors. Being the CEO of Tesla Motors Inc., Elon Musk thinks Tesla Motors as a legacy out of his other firms, as per the case study by Rothaermel and King (2015), suggests. The CEO of Tesla, has few speculations whether Tesla business pattern be sustainable, or will it continue to hold on its fame in the constantly increasing competition in the production of electric cars. He wants to plan and take action in order to make sure Tesla will be successful over years.

With the expansion of Tesla around the globe, majority of sales occur in USA where other international car companies of alternate energy have created quite a competitive market. The US government has been working on offering various incentives to the electric car companies so that a better infrastructure could be built for the adaption process of using electric cars since the oil prices have been sky-rocketing.

In contemplation of the conjecture made by Elon Musk, this project aims to analyze the potential factors that might affect or have affected the sales performance of Tesla cars by building statistical models on the past sales data.

Further sections in the paper will explain the steps taken to collect the data, what type of data has been considered towards the analysis, the hypothesis we have proposed, the statistical model built following with the verification analysis of such a model.

# Related Work

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