Tesla Global Deliveries Analysis

Analysis of the Past 10 Years
and Future Prediction

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ABSTRACT

This project analyzes Tesla's long-term growth trends and predicts its future performance based on global delivery data from the past decade. By analyzing annual delivery figures across different regions and car models, the study investigates changes in Tesla's deliveries over the last ten years, identifies the years of most significant growth, and compares differences between various markets and vehicle types.

This project uses a time series forecasting model to predict 2026 global deliveries, capturing both long-term trends and short-term volatility. The process utilizes Python for data cleaning, visualization, and modeling. The results are projected to show Tesla's ongoing global expansion and provide a data-driven prediction of its future growth potential.

KEYWORDS

Tesla, Global Deliveries, Time Series Forecasting, Data Analysis, Predictive Modeling, Market Expansion.

1 Introduction

Provide an introduction of your topics. Make sure you include the following part. What's your topic? Why is it important or interesting? What's the current research/results in this area. Include necessary citation.
Example format: xxxx.

2 Data

In this part, you should introduce your datasets.

The dataset contains Tesla's annual global delivery data by region and model from 2015 to 2025, with 2015–2024 as historical records and 2025 as an estimated value based on Tesla's Q1–Q3 reports.

2.1 Source of dataset

Where did you download it? Is it a credible source? When were the datasets generated? How were the datasets generated by the creator? If you create the datasets, how did you generate it?
Example: xxxx

The dataset was downloaded from Kaggle, contributed by Rehan Liaqat in 2024. Kaggle is a credible open data platform widely used for academic and analytical research. The dataset was compiled using Tesla's official quarterly and annual reports, along with publicly available delivery data from reputable financial and automotive news sources. It includes verified figures for 2015–2024 and an estimated projection for 2025 based on Tesla's Q1–Q3 2025 reports.

2.2 Characters of the datasets

What's the format and size of the datasets? What parameters/columns/rows/character and their units are included in this dataset. Use a table to explain this is recommended. Did you clean the data or convert any unit in the dataset? If so, what's the formula/rule did you apply? Did you combine any datasets? If so, how do you combine them? Did you create any new category for analysis in the datasets? If so, what and how do you create?

The dataset is in CSV (Comma-Separated Values) format and contains 2,640 rows and 12 columns. It covers Tesla's global delivery data from 2015 to 2025, including detailed information by region and vehicle model. The total file size is approximately 250 KB.
Data Cleaning and Processing
Format adjustment: Removed extra spaces and standardized column names for consistency.
Unit conversion: None required (all numeric fields already in consistent units).
Data combination: No additional datasets were merged; all analysis is based on this single Kaggle dataset.

*Article Title Footnote needs to be captured as Title Note
†Author Footnote to be captured as Author Note

WOODSTOCK'18, June, 2018, El Paso, Texas USA

3 Methodology

In this part, you should give an introduction of the methods/model. First, what's the method/model. What's the assumption of this method/model. What's the advantage/disadvantage of this method/model. Why did you choose it. What Python module or function do you apply to apply this method/model. Any optional input/extra work did you adjust to make the results better. If you have multiple methods, feel free to use subsection 3.1, 3.2, 3.3, … to separate them.

3.1 Heading Level 2

3.2 Heading Level 2

Example format: The updated template, user manuals, samples, and required fonts, all are available at the URL https://www.acm.org/publications/proceedings-template. It contains said information for all three versions of MS Word (Windows and 2 versions of Mac). There are also separate links to the user guide, which can be referred to by the user. This URL also contains some useful video links, which describe how to add the template, structure the paper, and generate the layout, in different clips. **Display Formula with Number**

$$\sqrt{b^2-4ac}\,\frac{-b\pm\sqrt{b^2-4ac}}{2a} \tag{1}$$

Continuation part of Paragraph Text The user must style this paragraph in **ParaContinue** style, which follows immediately after the **DisplayFormula** (numbered equation). The **DisplayFormula** style is applied only in case of a numbered equation. A numbered equation always has a number to its right. Insert paragraph text here. **Display Formula without Number**

$$\sqrt{b^2-4ac}\,\frac{-b\pm\sqrt{b^2-4ac}}{2a}$$

The **DisplayFormulaUnnum** style is applied only in case of an unnumbered equation. An unnumbered display equation never contains an equation number to its right, and this unique property distinguishes it from a numbered equation.

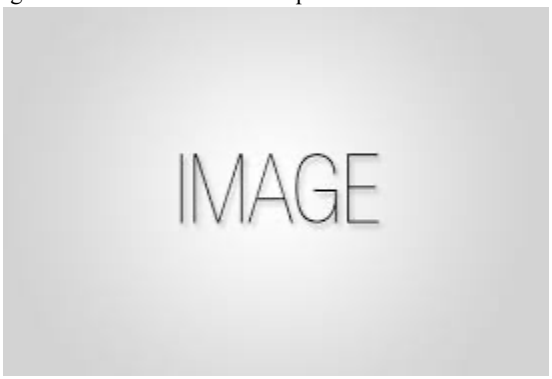

Figure 1: Figure Caption and Image above the caption [In draft mode, Image will not appear on the screen]

Theorem/Proof/Lemma. Insert text here for the enunciation or Math statement. Insert text here for the enunciation or Math statement. Insert text here for the enunciation or Math statement. Insert text here for the enunciation or Math statement. Insert text here for the enunciation or Math statement.

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4 Results

In this part, you need to select a reasonable way to deliver the result of your topic. For example, equation or numerical results, or visualization of your result. You also need to provide a clear explanation of all results and how to understand the results. If there exist any unexpected results, please explain why or possible cause of this special result. You can use subsection 4.1, 4.2, … to separate your results.

4.1 Heading Level 2

Example format: In the below paragraph, it is explained how alt-txt value is placed in **MS Word 2010**. To add alternative text to a picture in Word 2010, follow these steps:

1. In a Word 2010 document, insert a picture.
2. Right click on the inserted picture and select the **Format Picture** option.
3. Select the **Alt Txt** option from the left-side panel options.
4. In the "Title:" and "Description:" text boxes, type the text you want to represent the picture, and then click "Close".

Below are steps to place alt-txt value in **MS Word 2013/2016**. To add alternative text to a picture in Word 2013/2016, follow these steps:

1. In a Word 2013/2016 document, insert a picture.
2. Right click on the inserted picture and select the **Format Picture** option.
3. In the settings at the right side of the window, click on the "Layout & Properties" icon (3rd option).
4. Expand **Alt Txt** option.
5. In the "Title:" and "Description:" text boxes, type the text you want to represent the picture, and then click "Close".

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1.1.1.1 Heading Level 4. Insert paragraph text here. Insert paragraph text here. Insert paragraph text here. Insert paragraph text here. Insert paragraph text here. Insert paragraph text here. Insert paragraph text here. Insert paragraph text here. Insert paragraph text here. Insert paragraph text here.

5 Discussion

Every method/project has its shortage or weakness. Please discuss the unsatisfied results in your project. And discuss the feasible suggestions of future work to revise/improve your result.

6 Conclusion

In this part, you should summarize your project. What important results did you find for your topic and what's the effect of this result on the real-world?

ACKNOWLEDGMENTS

Insert paragraph text here. Insert paragraph text here.

REFERENCES

Use the following ACM Reference format for your citation

FirstName Surname, FirstName Surname and FirstName Surname. 2018. Insert Your Title Here: Insert Subtitle Here. In *Proceedings of ACM Woodstock conference (WOODSTOCK'18). ACM, New York, NY, USA, 2 pages.* https://doi.org/10.1145/1234567890

[1] Patricia S. Abril and Robert Plant, 2007. The patent holder's dilemma: Buy, sell, or troll? *Commun. ACM* 50, 1 (Jan, 2007), 36-44. DOI: https://doi.org/10.1145/1188913.1188915.

[2] Sten Andler. 1979. Predicate path expressions. In *Proceedings of the 6th. ACM SIGACT-SIGPLAN Symposium on Principles of Programming Languages (POPL '79)*. ACM Press, New York, NY, 226-236. DOI:https://doi.org/10.1145/567752.567774

[3] Ian Editor (Ed.). 2007. *The title of book one* (1st. ed.). The name of the series one, Vol. 9. University of Chicago Press, Chicago. DOI:https://doi.org/10.1007/3-540-09237-4.

[4] David Kosiur. 2001. *Understanding Policy-Based Networking* (2nd. ed.). Wiley, New York, NY..