



Car Analysis Dashboard

Advanced Analytics for Automotive Industry Data




Data Loading



 Load Data

- ✓ News data loaded: (2006, 22)
- ✓ Reviews data loaded: (2152, 26)
- ✓ Data loaded successfully!









Data Selection

Select Data Type: 


 News Articles 





Filters

 Date Range   Source   Sentiment 

2012/10/03 – 2025/07/20

All 


All 

 Showing 2006 records after applying filters

-  Overview & Metrics  Sentiment Analysis  Topic Modeling  Named Entity Recognition  Keyword Analysis  N-gram Analysis  Time Series Analysis  Ra



N-gram Analysis - Common Phrases and Patterns

 What is N-gram Analysis?

N-gram analysis helps us find **common phrases and patterns** people use when talking about cars. We look for combinations of 2 or 3 words that appear frequently together, giving us insight into how people naturally talk about cars and what phrases they commonly use.



Two-Word Phrases

Common word pairs people use



Three-Word Phrases

Common three-word combinations



Pattern Insights

What these patterns tell us



Two-Word Phrases - Common Word Combinations



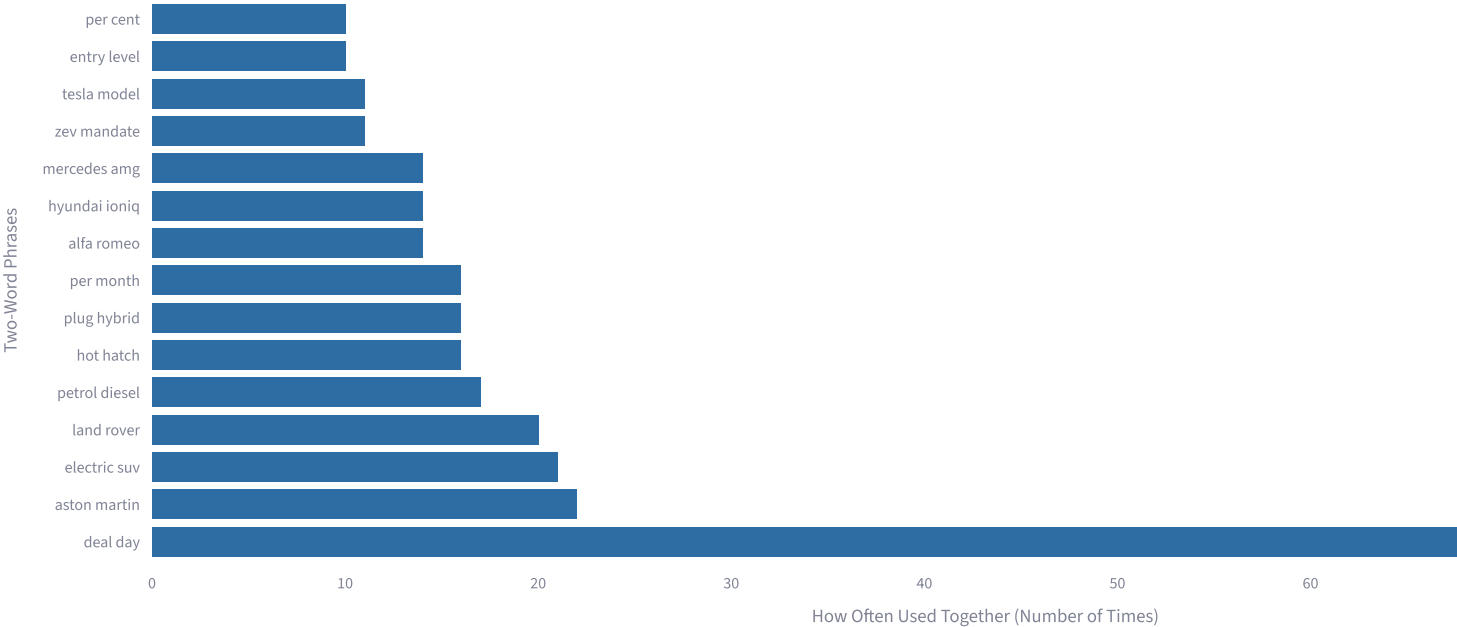
What Are Two-Word Phrases?

These are **pairs of words** that people often use together when talking about cars. For example, "electric vehicle", "fuel economy", or "safety features".

This helps us understand which concepts people naturally group together when discussing cars



News Articles N-grams - Most Common Two-Word Phrases



What This Chart Shows

The chart above shows the **most common two-word phrases** people use when talking about cars. The longer the bar, the more often people use that phrase combination.

- **Most popular phrase:** "deal day" appears 82 times
- **Total unique phrases:** 15 different two-word combinations found
- **Average usage:** Each phrase appears about 19.6 times on average

This helps you understand which car concepts people naturally talk about together



Total Two-Word Phrases ?

15



Most Popular Phrase ?

deal day



Total Usage ?

294

Top 10 Most Common Two-Word Phrases

Here are the 10 most common two-word phrases people use when talking about cars:

- 1. deal day - used together 82 times
- 2. aston martin - used together 22 times
- 3. electric suv - used together 21 times
- 4. land rover - used together 20 times
- 5. petrol diesel - used together 17 times
- 6. hot hatch - used together 16 times
- 7. plug hybrid - used together 16 times
- 8. per month - used together 16 times
- 9. alfa romeo - used together 14 times
- 10. hyundai ioniq - used together 14 times

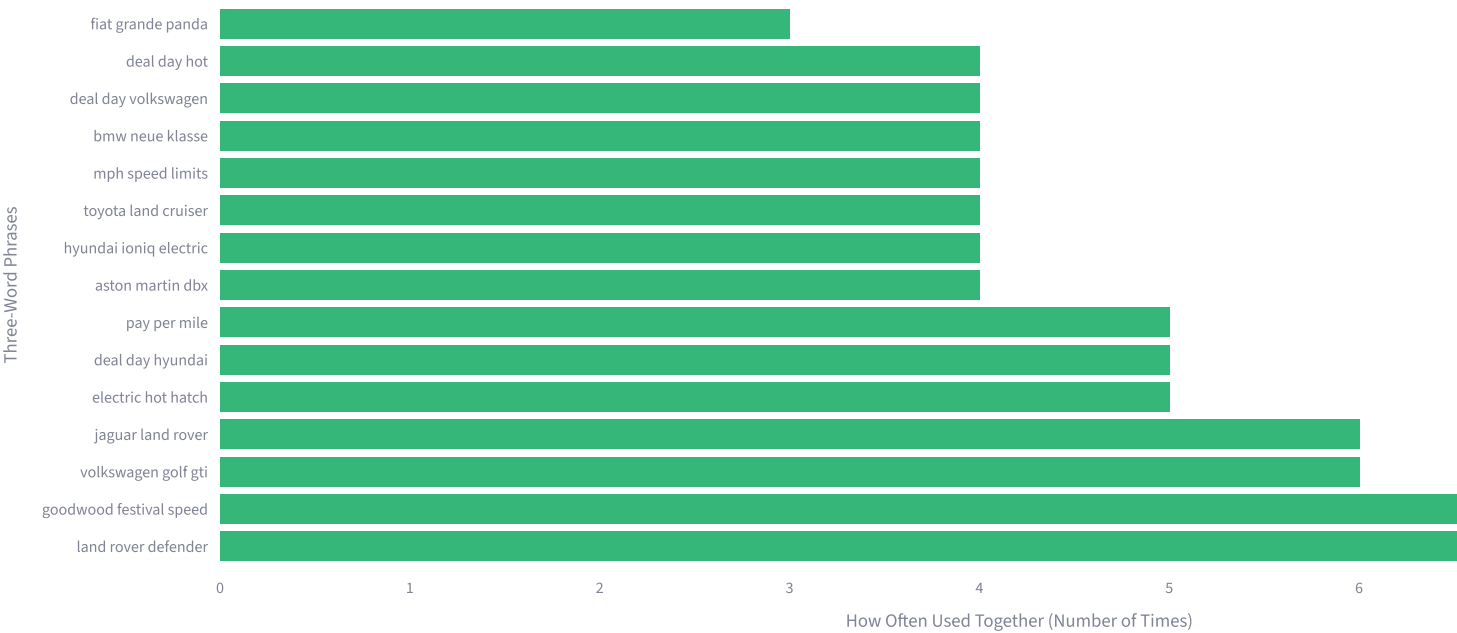
Three-Word Phrases - Longer Common Expressions

What Are Three-Word Phrases?

These are **combinations of three words** that people often use together when talking about cars. For example, "electric vehicle charging", "fuel economy rating", or "advanced safety systems".

 *This helps us understand longer, more specific expressions people use when discussing cars*

News Articles N-grams - Most Common Three-Word Phrases





What This Chart Shows

The chart above shows the **most common three-word phrases** people use when talking about cars. The longer the bar, the more often people use that three-word combination.

- **Most popular phrase:** "land rover defender" appears 8 times
- **Total unique phrases:** 15 different three-word combinations found
- **Average usage:** Each phrase appears about 4.9 times on average

💡 *This helps you understand which longer expressions people commonly use when discussing cars*

📄 Total Three-Word Phrases ⓘ

15

🔥 Most Popular Phrase ⓘ

land rover defender

📊 Total Usage ⓘ

73



Top 10 Most Common Three-Word Phrases

Here are the **10 most common three-word phrases** people use when talking about cars:

1. land rover defender - used together 8 times
2. goodwood festival speed - used together 7 times
3. volkswagen golf gti - used together 6 times
4. jaguar land rover - used together 6 times
5. electric hot hatch - used together 5 times
6. deal day hyundai - used together 5 times
7. pay per mile - used together 5 times
8. aston martin dbx - used together 4 times
9. hyundai ioniq electric - used together 4 times
10. toyota land cruiser - used together 4 times



What These Patterns Tell Us



Understanding Language Patterns

These phrase patterns help us understand:

- **Natural language** - How people naturally talk about cars
- **Important concepts** - Which car features or topics people mention most
- **Language habits** - Common ways people describe cars and car features
- **Consumer focus** - What aspects of cars people care about most

💡 *This information helps car manufacturers, marketers, and researchers understand how customers naturally think and talk about cars*



Key Insights from Both Two-Word and Three-Word Phrases

By looking at both types of phrases together, we can see:

- Which concepts are most important to people
- How people naturally group car-related ideas together
- Common expressions people use when discussing cars
- Language patterns that help us understand customer preferences

 Car Analysis Framework - Advanced Analytics for Automotive Industry Data

Built with Streamlit • Powered by AI and Machine Learning