

# Predictive Decision-Making Using Analogies



## Product Insights Study

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# Aims

- Overview of Analogies
- Understanding Analogies in Forecasting
- Real-world Applications
- Case Studies
- Benefits and Shortcomings
- Final Thoughts

“History Doesn't  
Repeat Itself, but It  
Often Rhymes”

*-Mark Twain*

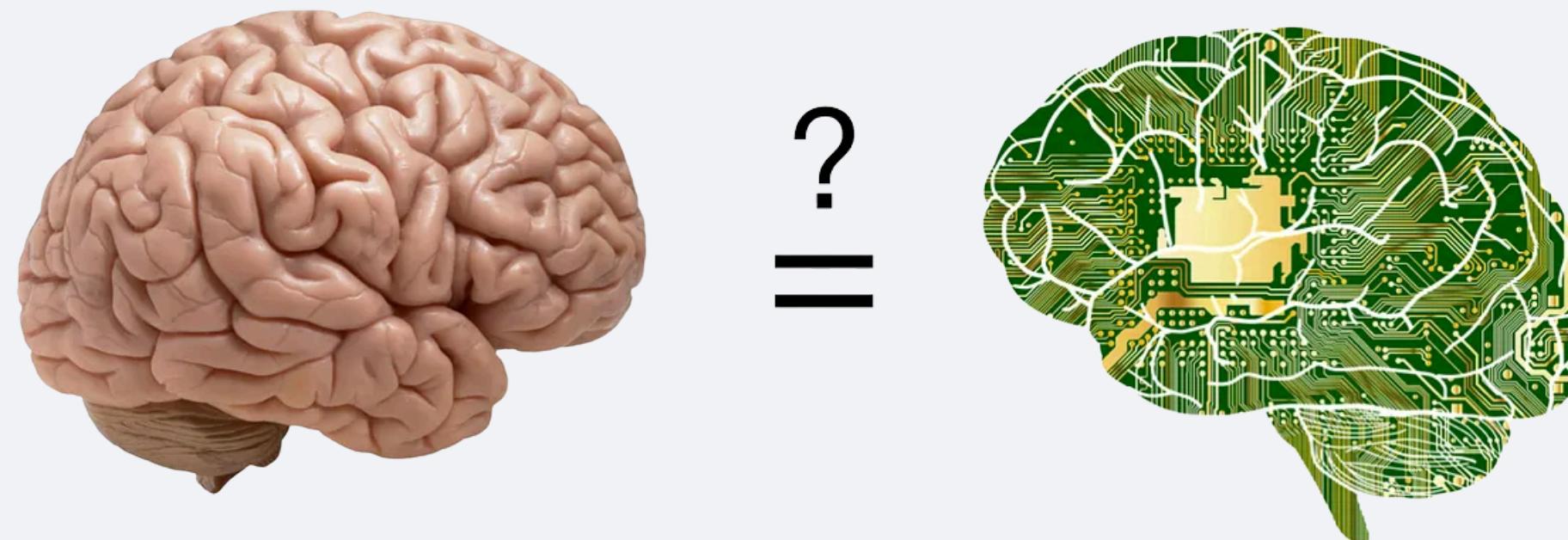
# What is an Analogy?

An analogy is a comparison between two different things that share similar characteristics. It helps explain a concept or predict an outcome by drawing connections between seemingly unrelated ideas.

# Example of an Analogy

## The Brain vs. A Computer Processor

A computer processor can be analogised to a brain because both process information and control operations. The brain processes thoughts, while the CPU processes data, thereby both acting as the "command center" for their systems.



# Why are Analogies so Powerful?

Simplify complex ideas

Help explain new concepts using familiar examples.

Enhance Understanding

Help grasp abstract or unfamiliar ideas faster.

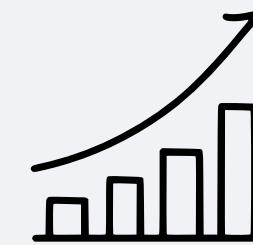
Explain Better

Make explanations clearer and more relatable.

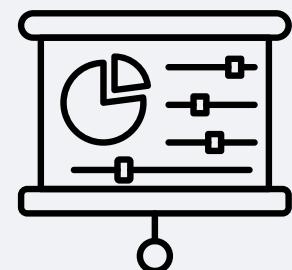
# What is Analogical Forecasting?

Analogical forecasting is a method that predicts future events by identifying similarities between past and present scenarios.

Useful when historical data is scarce especially for emerging trends.



Simplifies complex forecasting problems by using relatable comparisons.



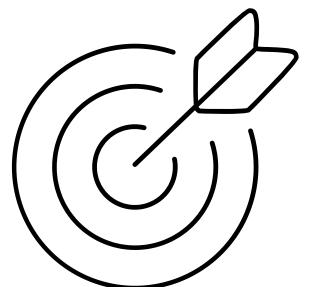
Widely applied in business, finance, technology, and strategy.



# The Analogy Process

1

Identify the target situation (what needs to be forecasted)



2

Find relevant historical cases with similar characteristics



3

Compare key features and extract lessons



4

Apply insights to predict future outcomes



# Types of Analogies

Type	Description	Real-World Example
<b>Structured Analogies</b>	Experts systematically identify analogies, rate similarity, and use weighted averages for forecasts.	Forecasting curriculum development timelines by comparing to analogous global projects (8 years completion)
<b>Historical Analogy</b>	Predicts outcomes by comparing attributes to past cases (e.g., property features).	Pricing houses by comparing to recently sold properties with similar attributes.

# Similarity Assessment

Compare structural,  
functional, and  
contextual similarities.

Weigh key factors based  
on relevance to the  
forecast.

Adjust for differences  
that could impact  
predictions.

# Real-World Applications

# New Product Adoption

Step	Description
1	Identify past products with similar features by selecting those with similar core functionalities.
2	Assess differences in price, demographics, and competition.
3	Adjust the historical adoption curve for the new product's unique market conditions.
4	Validate the forecast using market research or a pilot study.



Source: Mahajan, V., Muller, E. and Bass, F.M. (1995) 'New-product diffusion models in marketing: A review and directions for research', Journal of Marketing, 54(1), pp. 1–26.

Source: Goodwin, P., Dyussekeneva, K. and Meeran, S. (2013) 'The use of analogies in forecasting the annual sales of new electronics products', IMA Journal of Management Mathematics, 24(4), pp. 407–422.

Source: Gilliland, M. and Guseman, S. (2010) 'Forecasting new products by structured analogy', The Journal of Business Forecasting, 28(4), pp. 12–15.

# Supply Chain & Demand

Step	Description
1	Select past periods, events, or products with similar market conditions or demand patterns
2	Analyse sales volumes, customer traffic, transaction sizes, and product performance data from the analog periods.
3	Factor in changes such as market trends, economic conditions, technological shifts, and competitive dynamics.
4	Pilot data, early sales indicators, and expert feedback to fine-tune projections.



Source: Green, K.C. and Armstrong, J.S. (2007) 'Structured analogies for forecasting', International Journal of Forecasting, 23(3), pp. 365–376.

Source: Lee, W.Y., Goodwin, P., Fildes, R., Nikolopoulos, K. and Lawrence, M. (2007) 'Providing support for the use of analogies in demand forecasting tasks', International Journal of Forecasting, 23(3), pp. 377–390

# Marketing Campaign

Step	Description
1	Identify comparable past campaigns with similar target audiences and media mixes.
2	Gather key metrics such as conversion rates, reach, and engagement from those campaigns.
3	Adjust the forecast to account for differences in budget, campaign duration, and brand reputation.
4	Validate the forecast by comparing early pilot results with the projected outcomes.



Source: Green, K.C. and Armstrong, J.S. (2007) 'Structured analogies for forecasting', International Journal of Forecasting, 23(3), pp. 365–376.

Source: Kotler, P. and Keller, K.L. (2012) Marketing Management, 14th edn. Pearson.

# Case Study I

# Predicting a Hit: The Role of Analogical Forecasting in Netflix's House of Cards



Global streaming service offering movies, TV shows, and originals.

House of Cards  
Netflix original political drama

# The Key Factors Behind Netflix's House of Cards Prediction



**Viewer Behaviour Analysis**



**Tailored Marketing**

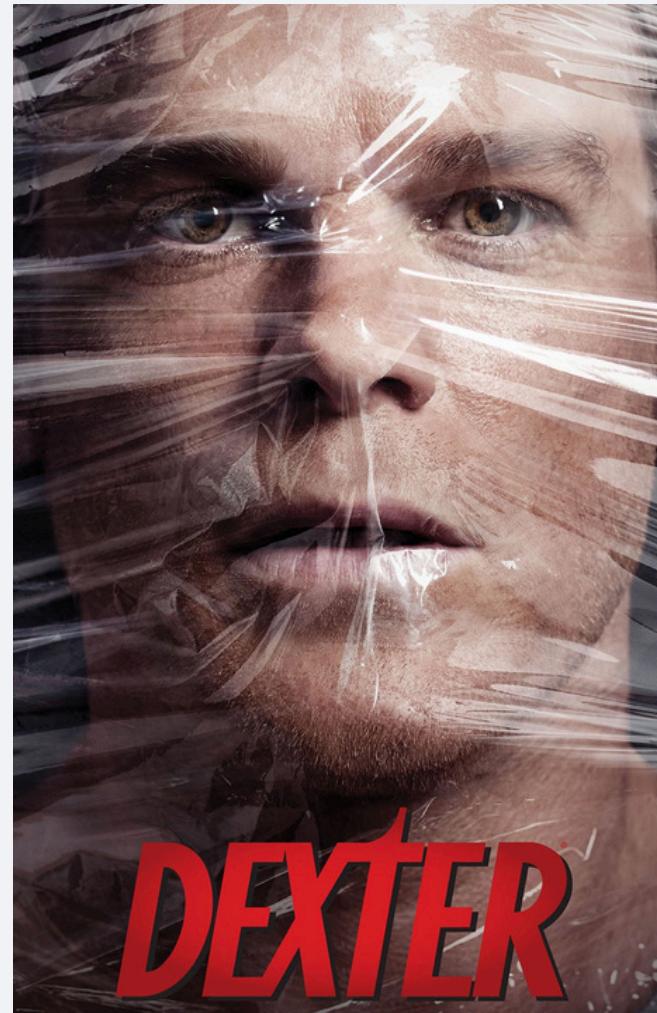


**Analogy and Trends**



**Creative Confidence**

# Analogy I: Genre Performance



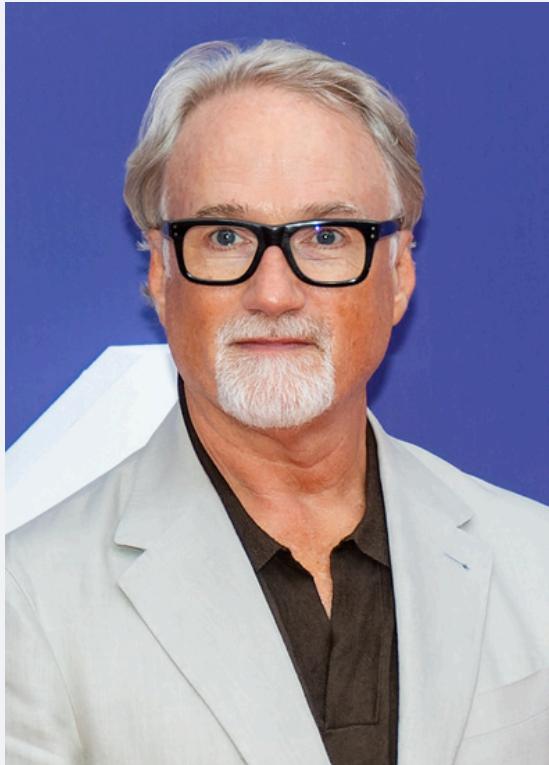
- Political dramas have long been a point of interest for audiences e.g, films like Lincoln, drama series such as Veep, had been major hits.
- Analogy : Recognising the genre's popularity, Netflix anticipated House of Cards would be a success.

Image Source: "Dexter." Rottentomatoes.com, [www.rottentomatoes.com/tv/dexter](http://www.rottentomatoes.com/tv/dexter).

Image Source: "Breaking Bad." IMDb, 20 Jan. 2008, [www.imdb.com/title/tt0903747/](http://www.imdb.com/title/tt0903747/).

Source : Young, Michael. Beholding Beauty: Aesthetics, Style and Sensation in US Quality Television Political Thrillers. 2021.

# Analogy II: Viewer Preferences



**Netflix analysed viewer data and found the following**

- A large audience enjoyed political dramas (e.g., *The West Wing*).
- Fans of David Fincher's work (e.g., *The Social Network*) were highly engaged.
- Kevin Spacey's movies (e.g., *American Beauty*) were popular on the platform.

**Analogy:** A political drama with Fincher and Spacey would likely appeal to the audience



Image Source: Wikipedia Contributors. "David Fincher." Wikipedia, Wikimedia Foundation, 30 May 2019, en.wikipedia.org/wiki/David\_Fincher.

Image Source: richard0211. "Flicking through Netflix: The West Wing (First Impressions)." Richard's Weekly Journal, 24 Feb. 2017, richardsweeklyjournal.wordpress.com/2017/02/24/flicking-through-netflix-the-west-wing-first-impressions/. Accessed 3 Mar. 2025.

Image Source: "Kevin Spacey." IMDb, 26 July 1959, www.imdb.com/name/nm0000228/.

Image Source: "American Beauty on Netflix | UNoGS." Unogs.com, 2025, unogs.com/movie/60000407/american-beauty. Accessed 3 Mar. 2025.

Source: Datoo, Siraj Datoo. "How Netflix Uses Your Data to Work out What You Want It to Commission." The Guardian, 7 Mar. 2014, www.theguardian.com/media-network/media-network-blog/2014/mar/07/netflix-data-house-cards.

# Analogy III: Talent Appeal



Netflix analysed the track record of

- David Fincher : Known for hits like "Fight Club" and "The Social Network."
- Kevin Spacey : Acclaimed for roles in "American Beauty" and "The Usual Suspects."

Analogy: Combining their talents would attract a large and loyal audience.

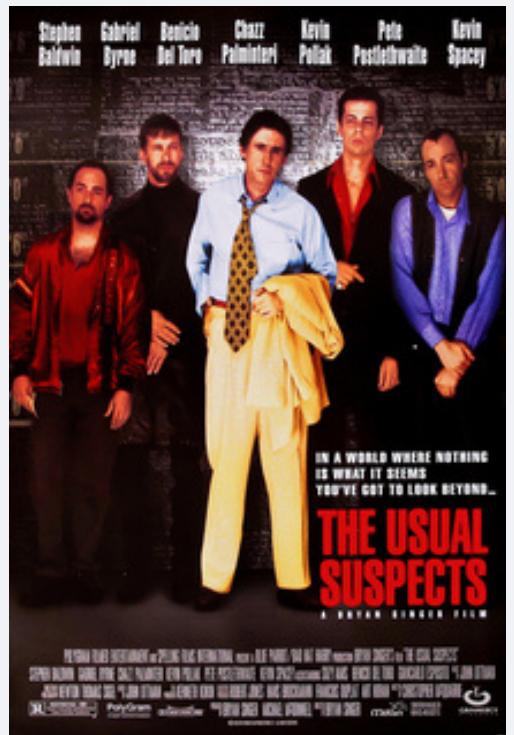
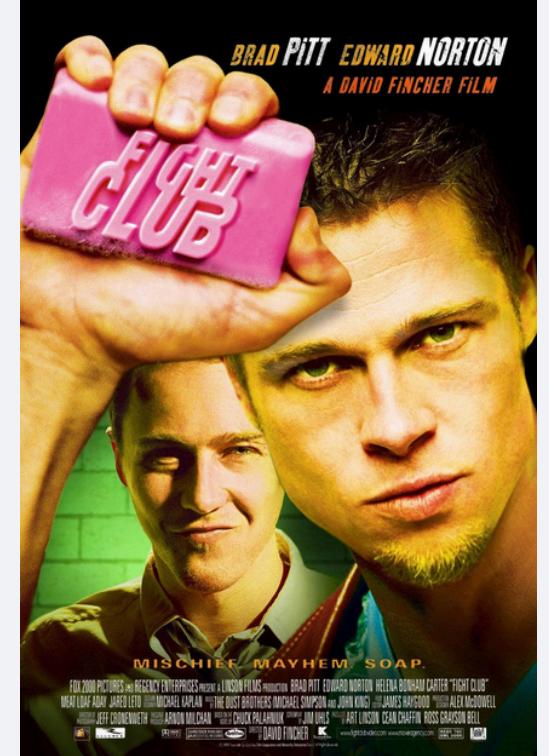


Image Source: "The Usual Suspects." Gstatic.com, 2025, encrypted-tbn2.gstatic.com/images?q=tbn:ANd9GcSZaoG2mpiEBneoW8rCitQ8mSuSTbFRkoDy6prZrD3IJOWgb4\_u. Accessed 4 Mar. 2025.

Image Source: "Fight Club." IMDb, 15 Oct. 1999, www.imdb.com/title/tt0137523/.

Image Source: Dargis, Manohla. "Millions of Friends, but Not Very Popular." The New York Times, 23 Sept. 2010, www.nytimes.com/2010/09/24/movies/24nyffsocial.html.

Source: Vena, Danny. "How Netflix Uses Algorithms to Attract Top Talent." The Motley Fool, 19 May 2018, www.fool.com/investing/2018/05/19/how-netflix-uses-algorithms-to-attract-top-talent.aspx. Accessed 4 Mar. 2025.

# Analogy IV: Binge-Watching Behaviour

**Netflix observed that viewers often binge-watched highly engaging series**

- This led to the decision to release all episodes at once, a strategy that differentiated Netflix from traditional TV.

**Analogy:** If House of Cards had a gripping storyline, viewers would binge-watch it.



# Outcomes

1

"House of Cards" became one of Netflix's most-watched original series.

2

Won multiple awards (Golden Globes, Emmys).

3

Set the stage for future hits like "Stranger Things" and "The Crown."

4

Established Netflix as a major player in original content production, attracting top talent and driving subscriber growth

Source: Rumble, Taylor-Dior. "7 Shows That Helped Make Netflix so Popular." BBC News, 18 July 2018, [www.bbc.co.uk/news/entertainment-arts-44870538](http://www.bbc.co.uk/news/entertainment-arts-44870538).

Source: Affinity, Film . "FilmAffinity." FilmAffinity, 2018, [www.filmaffinity.com/en/movie-awards.php?movie\\_id=706350](http://www.filmaffinity.com/en/movie-awards.php?movie_id=706350).

Source: ByteBridge. "Netflix: Industry Leader in Streaming Entertainment." Medium, 19 Jan. 2025, [bytebridge.medium.com/netflix-industry-leader-in-streaming-entertainment-3fddb2c7f15d](http://bytebridge.medium.com/netflix-industry-leader-in-streaming-entertainment-3fddb2c7f15d).

# Advantages

Analogies in forecasting help predict outcomes by leveraging historical data.

Forecasting analogies reduce risk and increase the likelihood of success.

Netflix's success with "House of Cards" shows the power of data-driven decision-making.

This approach can be applied to other industries and decision-making processes.

# Benefits of Using Analogies

1

Patterns and Trends  
Identified

2

Better Strategic  
Decisions

3

Risk Mitigation

4

Informed Decision-  
Making

5

Competitive Advantage

# Analogical forecasting

# Misreading the Market: Ford's \$250 Million Forecasting Mistake



## Ford Edsel (1958-1960)

Image Source: WikiPictures. (1958) 1958 Edsel Advertisement, 'This is the Edsel'. [Advertisement] Dearborn, MI: The Henry Ford. Artifact ID 364060.

# What was the Ford Edsel?



**Launched by Ford in  
the late 1950s as a  
mid-range luxury car**



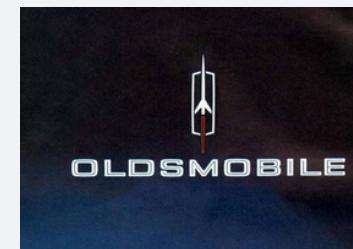
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**Aimed to compete  
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# What was the Ford Edsel?

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Aimed to compete with General Motors' Oldsmobile & Chrysler's DeSoto



Expected to fill a gap between Ford & Mercury brands



# Analogy in the Edsel Case



Ford Fairlane (1955)



Edsel (1958)

**Ford used the success of Fairlane to predict Edsel's performance. But did the same strategy work?**

Source: Autoevolution (2021) 'First-gen 1955 Ford Fairlane looks harsh in its underwear'. Autoevolution. Available at: <https://www.autoevolution.com/news/first-gen-1955-ford-fairlane-looks-harsh-in-its-underwear-154088.html> (Accessed: 6 March 2025).

# Analogy Analysis

Aspect	Ford Fairlane (Successful Model)	Ford Edsel
Launch Year	1955	1957
Market Target	Mid-range luxury buyers	Mid-range luxury buyers
Consumer Trend	Rising demand for stylish, mid-priced cars	Expected continued demand for mid-priced cars
Competitive Edge	Well-priced, stylish, familiar branding	Advanced features, unique design
Economic Condition	Strong post-war economy	Assumed similar demand as before
Marketing Approach	Traditional advertising, positioned as a stylish upgrade	High-budget marketing campaign with a big launch



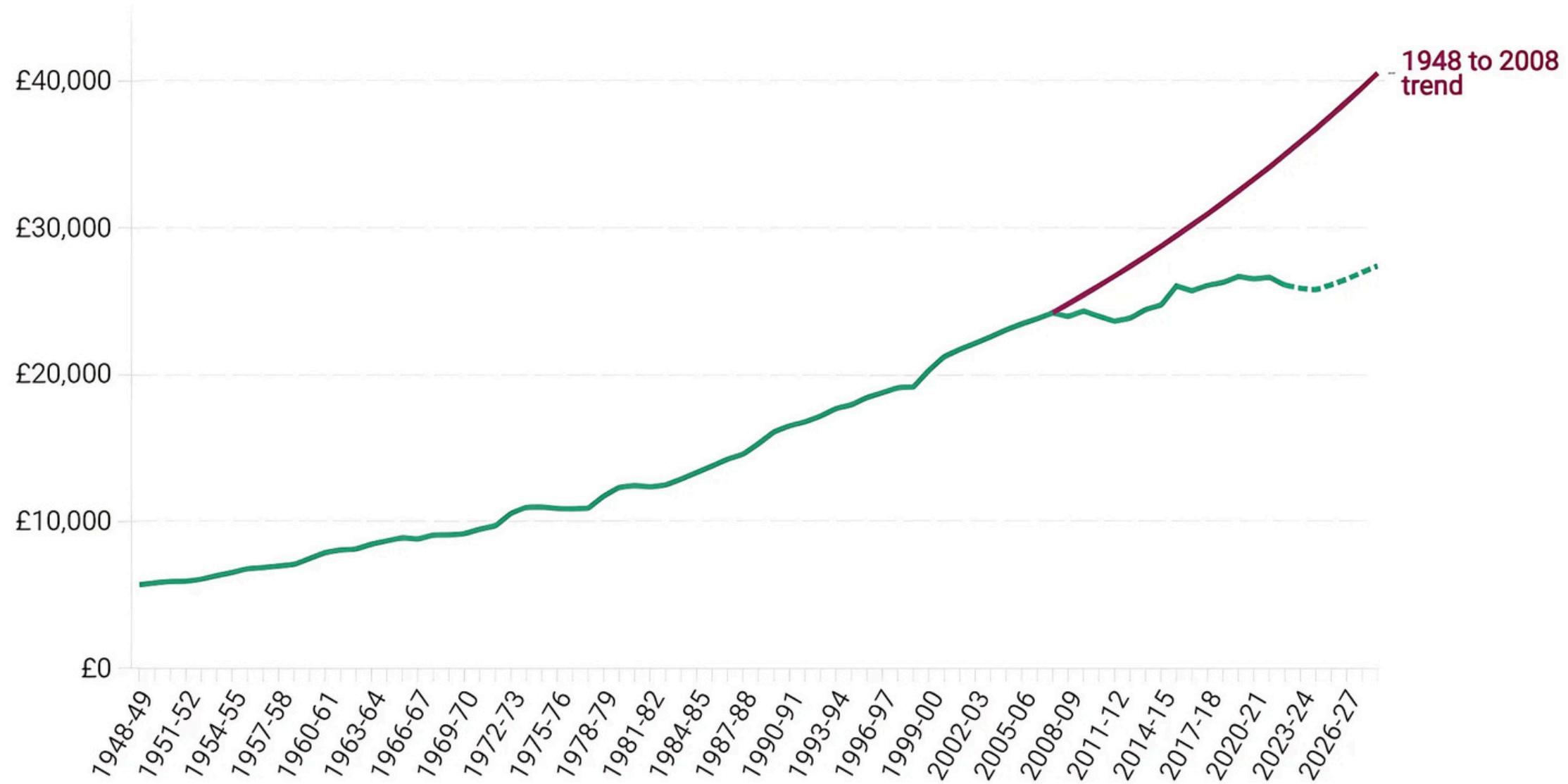
# Economic Trends

## Post War Economic Boom

**Source:** Old Urbanist (2013) Was the rise of car ownership responsible for the decline of public transit in the 1950s and 60s?. Available at: <https://oldurbanist.blogspot.com/2013/02/was-rise-of-car-ownership-responsible.html> (Accessed: 5 March 2025).

**Figure 3. Real household disposable income since 1948–49**

£ per year (2023-24 prices)



Source: Authors' calculations using ONS data series NRJR and EBAQ, and OBR Economic and Fiscal Outlook, November 2023. • Note:  
Dashed line denotes the OBR's November 2023 forecast.

[Download the data](#)

# Income Trends

## Growing Disposbale Income



Source: MotorTrend (n.d.) 1958 Edsel Full Lineup. Available at: <https://www.motortrend.com/vehicle-genres/12q2-1958-edsel-full-lineup/> (Accessed: 5 March 2025).

**General Motors**



**Chevrolet Bel Air (1955)**

**Chrysler**



**Chrysler Windsor (1941)**



**Oldsmobile 88 (1955)**



**Chrysler 300 (1955)**

# Industry Trends

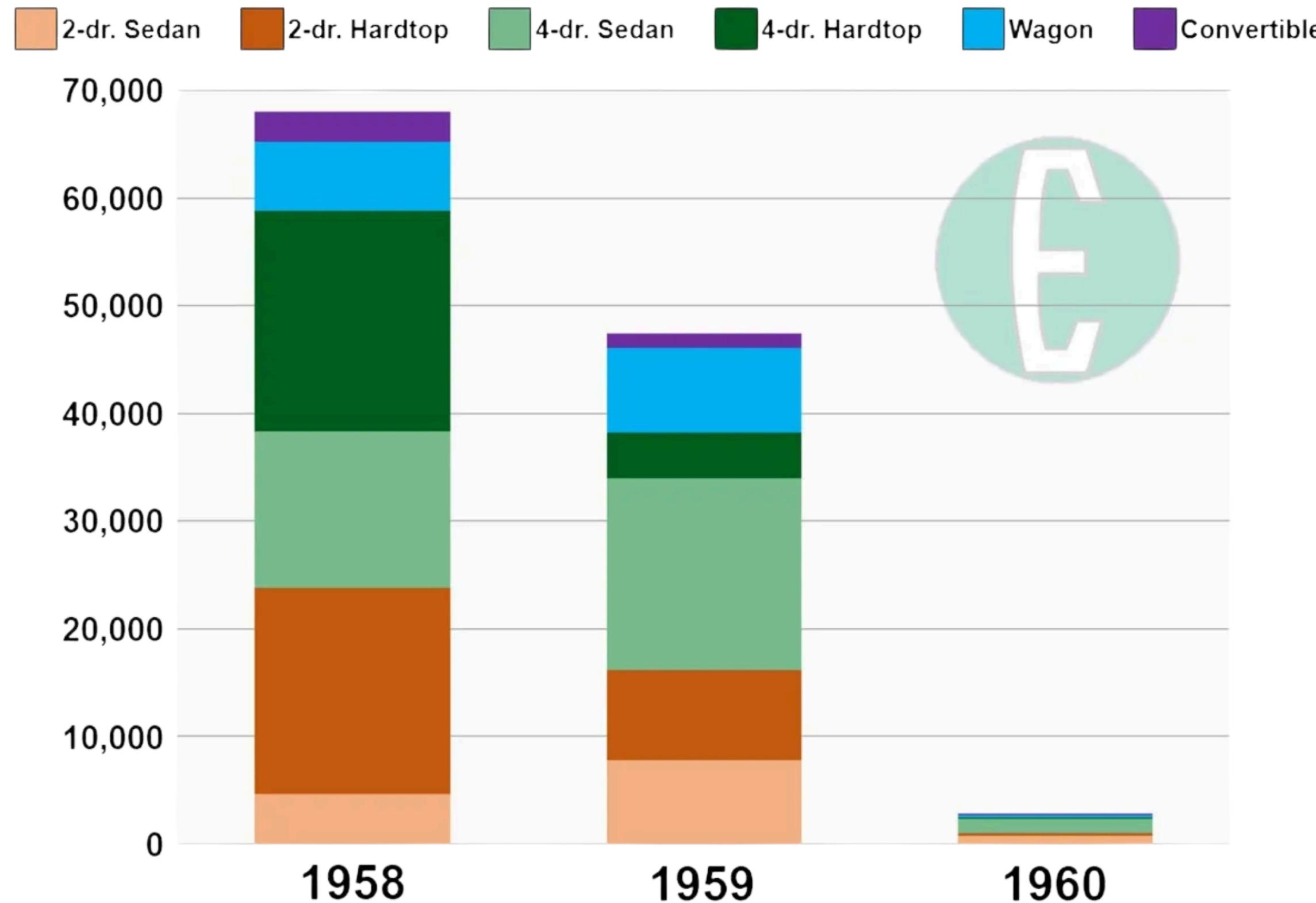
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**Competitors' successes**

# Major Causes Behind Ford Edsel's Downfall

Index	Reason	Description
1	<b>Misjudging Market Trends</b>	Demand shifted towards smaller, fuel-efficient cars.
2	<b>Flawed Assumptions About Customer Behaviour</b>	Design and pricing misaligned with expectations.
3	<b>Failure to Account for Competition</b>	More attractive alternatives from GM & Chrysler.
4	<b>Economic Conditions Changed</b>	Late 1950s recession reduced consumer spending.
5	<b>Operational and Quality Issues</b>	Production defects and complicated controls.

## Edsel Production by Model Year and Body Style



Source: Curbside Classic, 2014. Curbside Classic: Automotive History: 1959 Edsel Corsair And A History Of Edsel Dealers – A Different Perspective. [online] Available at: <https://www.curbsideclassic.com/automotive-histories/curbside-classic-automotive-history-1959-edsel-corsair-and-a-history-of-edsel-dealers-a-different-perspective/3/> [Accessed 5 March 2025].

# The Consequences of Poor Forecasting

- 1 \$250 million spent on development and marketing.
- 2 Sales far below expectations.
- 3 Discontinued after just 3 years.
- 4 One of the biggest failures in automotive history.



# Shortcomings in Forecasting Analogies

1

Overgeneralisation

2

Selection Bias

3

Changing Market Dynamics

4

Lack of Data Validation

5

Industry-Specific Differences

# Final Thoughts

Analogies are powerful tools for explanation and prediction.

Analogical Forecasting helps predict future trends.

While useful, analogies must be applied carefully.

# Thank You!

