- C A N O

Detailed financial analysis



# Canoo

(NASDAQ: GOEV), a US based leading high-tech advanced mobility Electric Vehicle (EV) company founded in 2017 by Ulrich Kranz.

Canoo's mission is to make electric vehicles (EVs) available to everyone. Canoo's goal is to lead the automotive industry's transition to clean and sustainable energy.

# Canoo

Canoo is an electric vehicle (EV) manufacturing company that has a mission to bring EVs to everyone through innovative design, cutting-edge technologies, and a unique business model.

The company has research teams based in Arkansas and Oklahoma, production operations in Michigan and California, and plans to build commercial electric vehicles, including fleet vans, vehicle rental, ride sharing services, and more. Canoo has recently tied up with NASA to provide vehicle for their Artemis mission.

Canoo offers a variety of vehicles, including

- Lifestyle Delivery Vehicle (LDV)
- American Bulldog Pickup.
- Canoo EV fleet.
- Modular electric platform.

#### Canoo's financial performance

In Canoo's stocks fell by 24% in 2023 after it announced that it would not achieve its targeted revenue. After which companies downfall started as its loss widened by \$3.5 million.

As of Q3 2023 Canoo keeps on burning \$300-400 million and forthcoming production will need to be funded by more fundraising.

Canoo's last fiscal year end was \$1,672,444,800. It is 12th largest company in EV sector.

Sector	Consumer Cyclical
Market Cap	\$156,933,008
Symbol	GOEV
Current Stock Price	\$0.1409
Total Cash	\$12,294,000
Ebitda	\$-273 <b>,</b> 868 <b>,</b> 000
Total Revenue	\$519 <b>,</b> 000
Total Debt	\$129,990,000

#### Canoo's Expense structure

Canoo's expense's kept on increasing since 2021.

Its operating expense in 2020 was \$201,598,000 in 2021 it was \$449,902,000 and in 2022 it stood to be \$506,801,000.

In first quarter of 2023 its expense was \$81,528,000 while in 2nd it was \$73,565,000 and in last it was \$49,288,000.

Its overall operating expense in 2023 stood to be \$48,385,000.

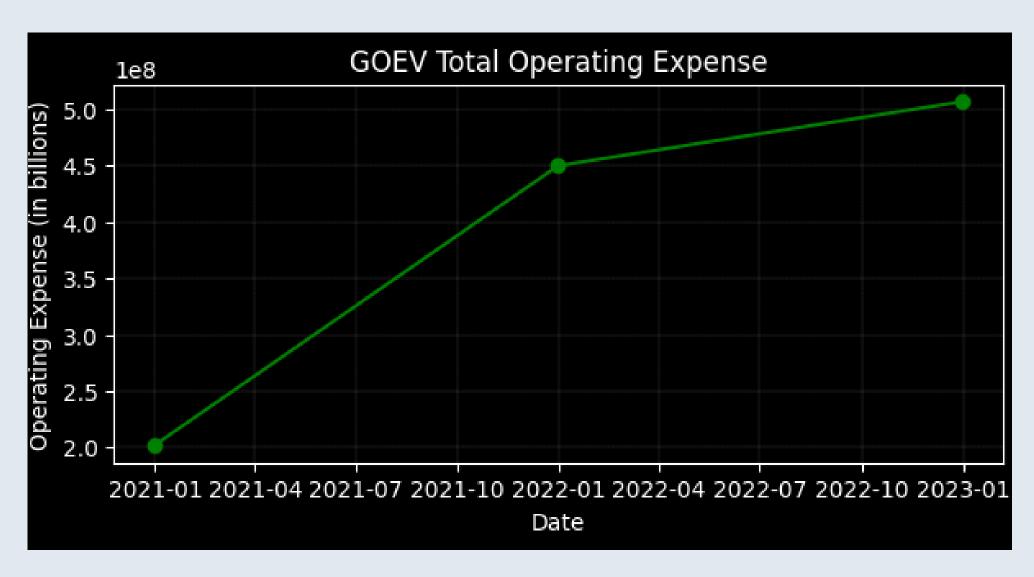


Fig: Expense structure of Canoo

#### Canoo's Net Income

GOEV's Yearly Net Income:

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2022-12-31 = $-487,694,000.0
2021-12-31 = $-346,768,000.0
2020-12-31 = $-86,686,000.0
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GOEV's Quarterly Net Income in 2023:

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2023-09-30 = \$-111,974,000.0

2023-06-30 = \$-70,870,000.0

2023-03-31 = \$-90,732,000.0
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Canoo hasn't generated single digit revenue since 2022. Its Expenses in 2023 were reported to be \$202,268,000.0

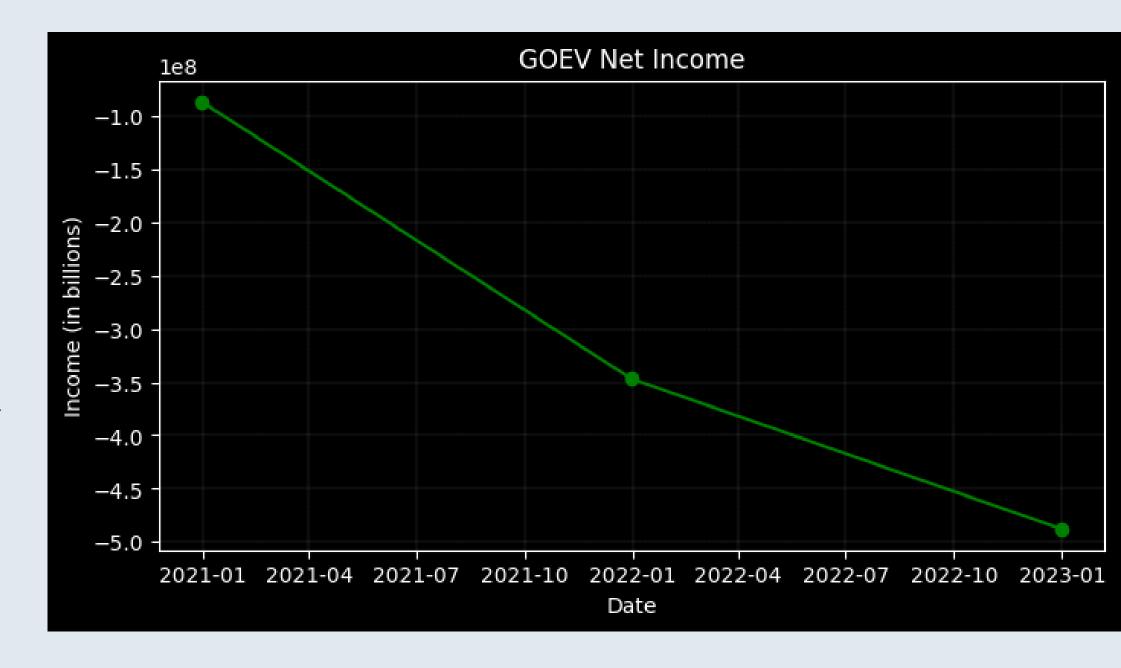


Fig: GOEV net income since 2021.

#### Canoo Total Revenue

\$2,550,000.0 which was similar to its operating revenue and since then it has not made any revenue in the year 2021 and 2022.

Its total Revenue in third quarter of 2023 was \$519,000.0 which was again similar to its operating revenue making no profit in 2023. It has not reported any revenue in 1st and 2nd quarter of 2023.

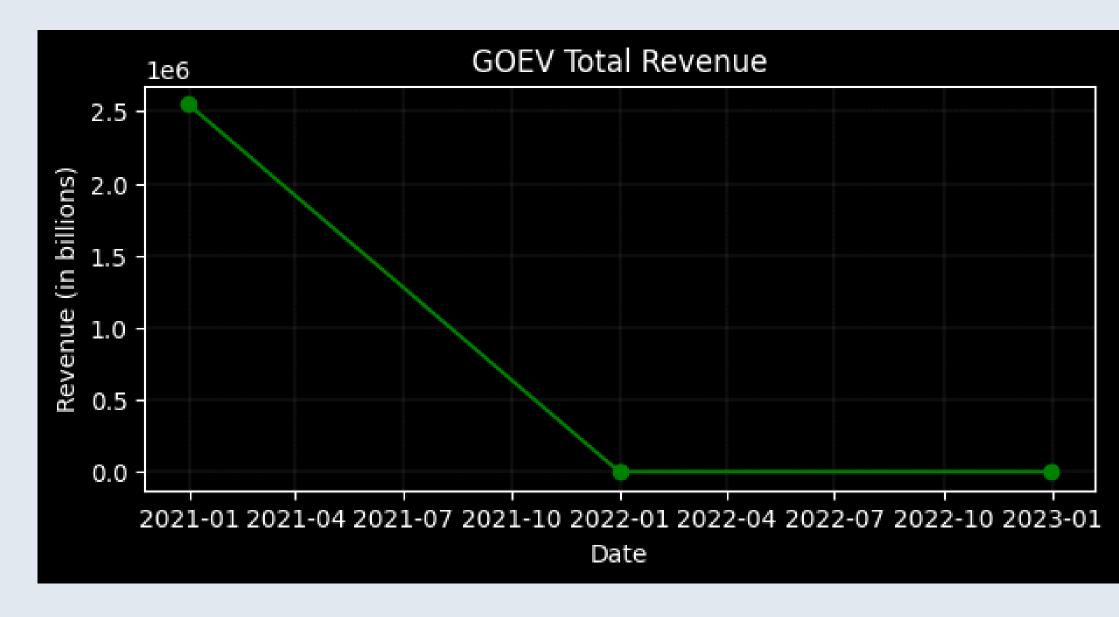


Fig: GOEV Total Revenue since 2021.

#### Profit Margin

Canoo reported profit only in 2020 which was \$1,880,000 since then it has not made any profit in

Its gross profit in 2020 was \$1,880,000.0 while in Q3 of 2023 was \$-384000.0.

Canoo reported \$-192,593,000.0
EBITDA in 2020. While it reported \$-440,981,000.0 in 2021 and \$-495,247,000.0 in 2022 which clearly indicates why it couldn't make any profit in 2023.

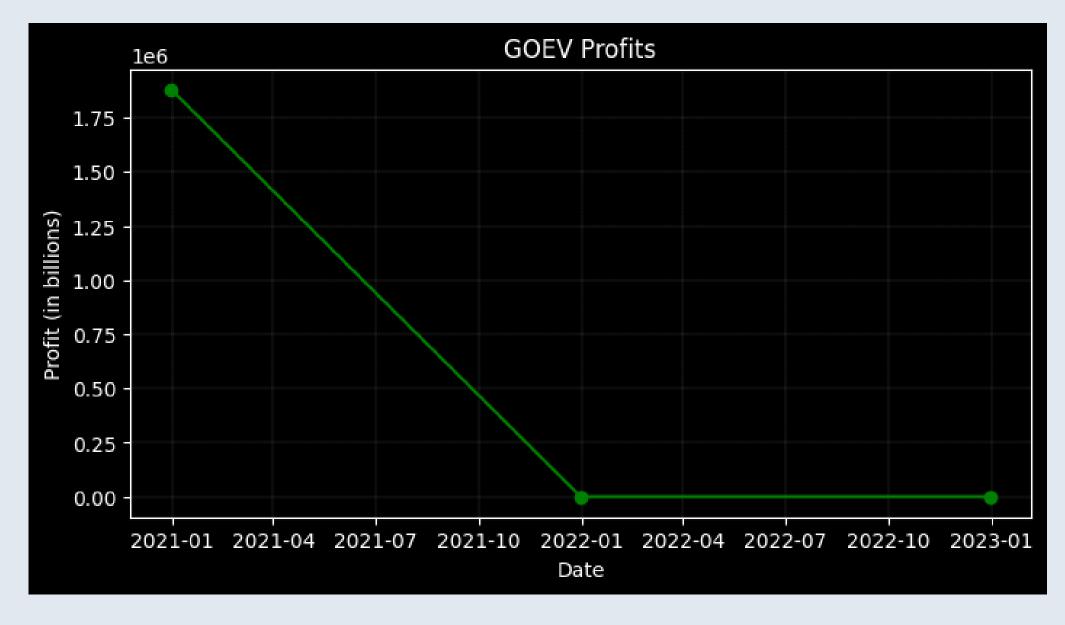


Fig: GOEV Total Profits since 2021.

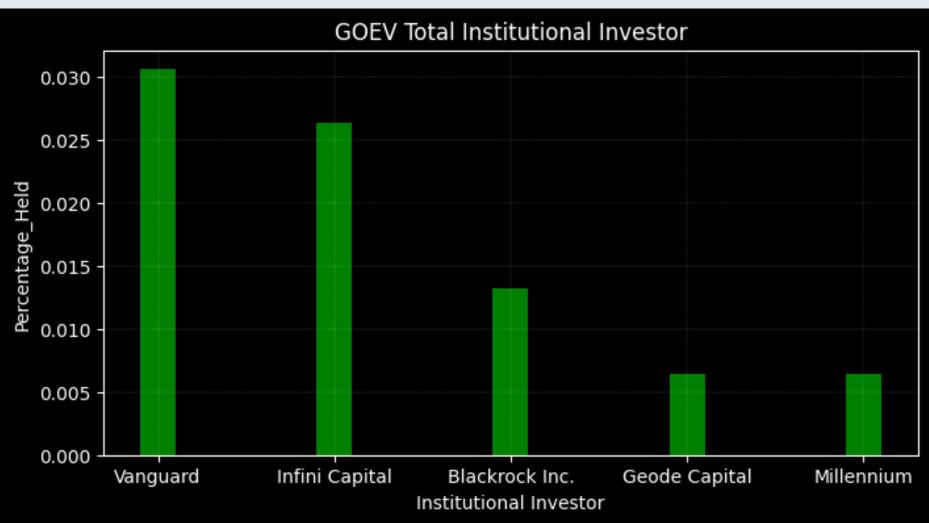
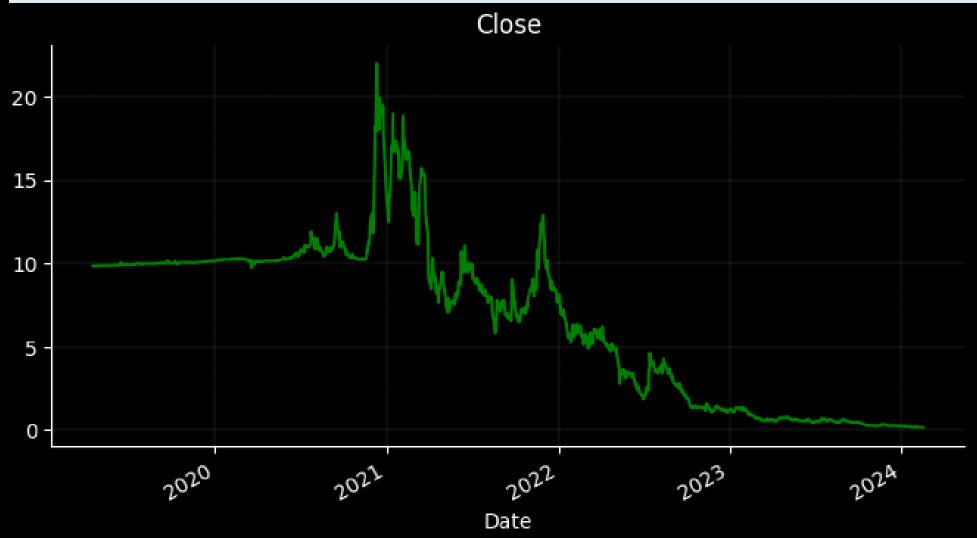


Fig: Total investment made in GOEV by institutional investors.

Fig: GOEV's Stocks since 2021.





# Direct Competitors

Rivian Automotive

Fisker Inc

Lucid Group

# Indirect Competitors

Mobileye Global

quantumscape corp

Visteon Corp

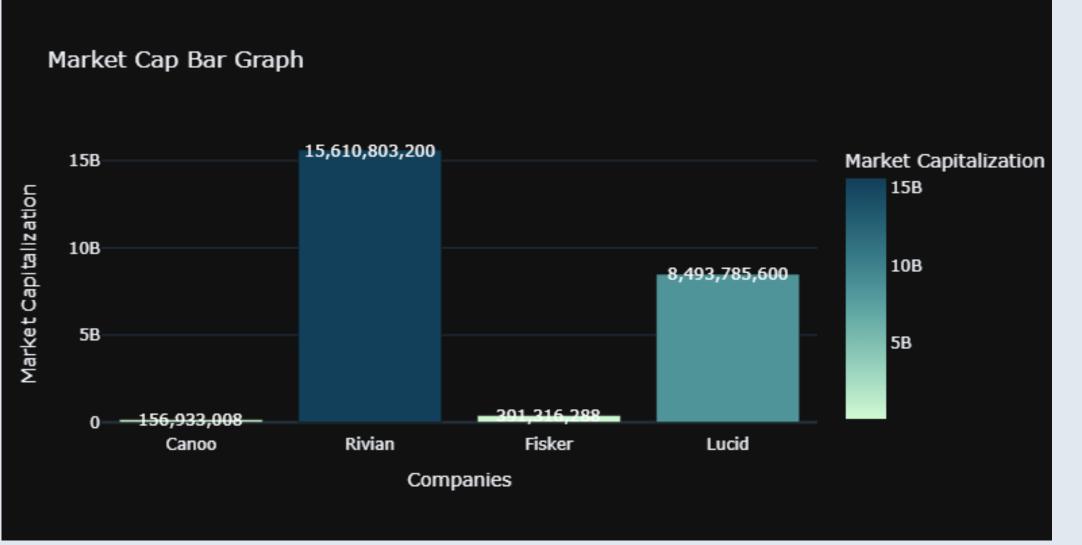
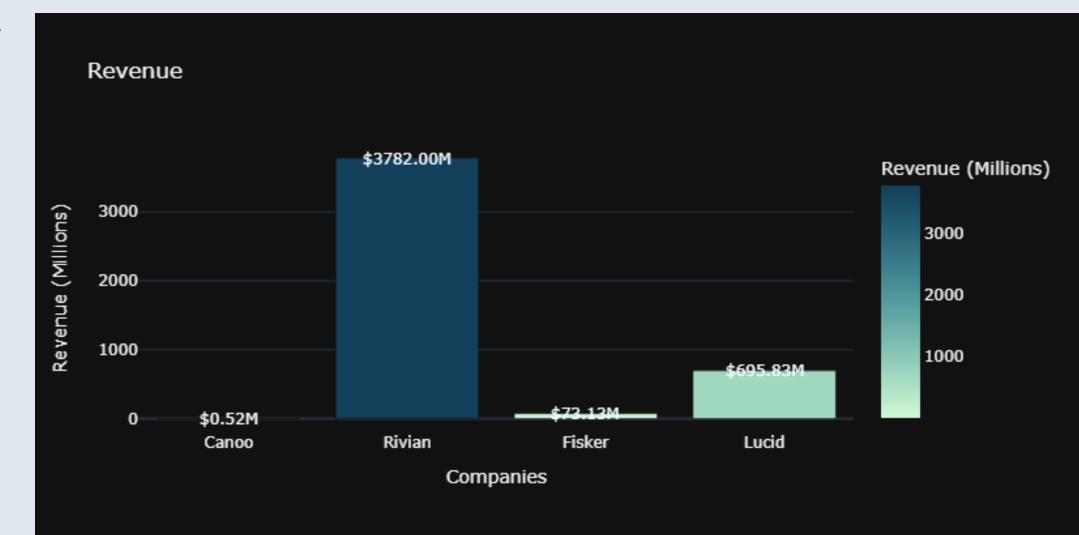


Fig: Market size of each comapany

Fig: Revenue of each company



#### Products and services offered:

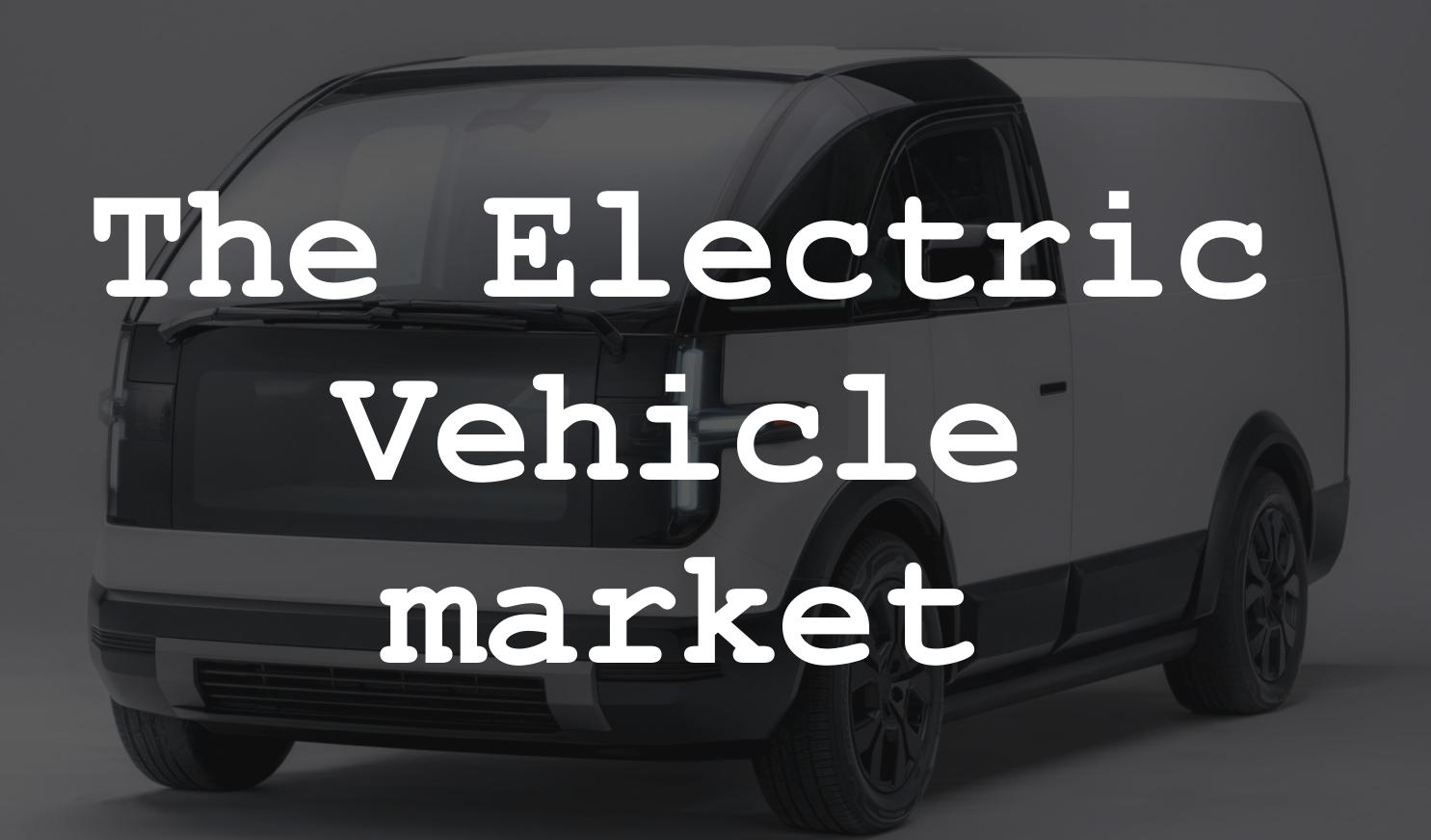
Canoo	Electric vehicles, Lifestyle delivery vehicles, Digital ecosystems, Multi-purpose platforms
Rivian	R1T(pickup truck), R1S(SUV), EDV(Delivery van), Battery packs, software solutions, IT, repair, and maintenance services.
Fisker	Fisker Ocean(SUV), Fisker Karma Revero (hybrid car), Fisker's asset-light approach
Lucid	luxury electric cars, EV powertrains, and battery systems

## Pricing offered:

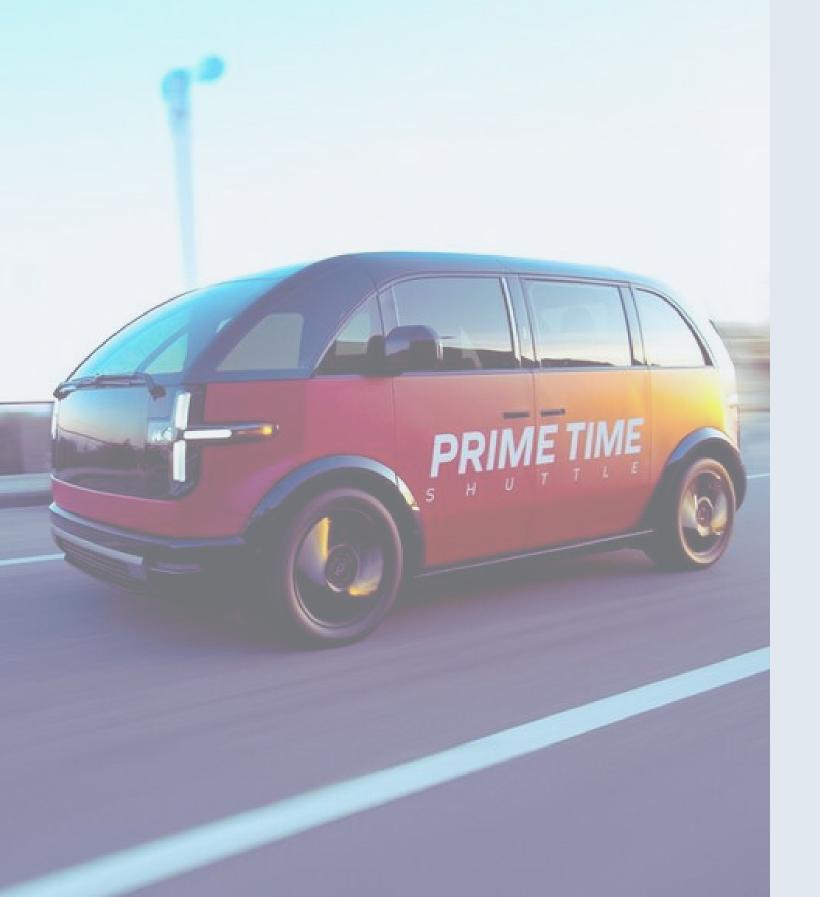
Canoo	Base price for the Lifestyle Vehicle (LV) is about \$35,000, and the MPDV is about \$33,000.
Rivian	Truck starts at \$80,800 and goes up to \$82,850. The R1S crossover SUV starts at \$74,900.
Fisker	Fisker Ocean has a starting price of \$38,999, \$52,999, \$61,499 for the Sport Ultra and Extreme trim.
Lucid	Lucid Air Pure RWD has a starting price of \$71,400, Lucid Air Touring model has a starting price of \$77,900.

### Marketing Strategy:

Canoo	Interactive website, unique design, competitive pricing, VR based showroom, physical location.
Rivian	Targeting Online marketplace, advertisements, public relations personal selling and unique hashtag #ElectricAdventure.
Fisker	Offers discounts and special deals, digital, print, television advertisements, online campaign.
Lucid	omnichannel marketing campaign, placed stores in strategic location's.



# Market Size



# \$500.48 Billion

TOTAL AVAILABLE MARKET

\$384.65 B

SERVICEABLE AVAILABLE MARKET

\$20.42 B

# Global EV Demand Forecast:

As per report stated by evvolumes the global EV sales which comparises of batteryelectric vehicles (BEVs) and plug-in hybrids (PHEVs), will reach 14.1 million units in 2023.

This estimates that EV sales will increase by **34%** compared with 2022.

Over 300,000 additional EV sales are now expected globally in 2023.

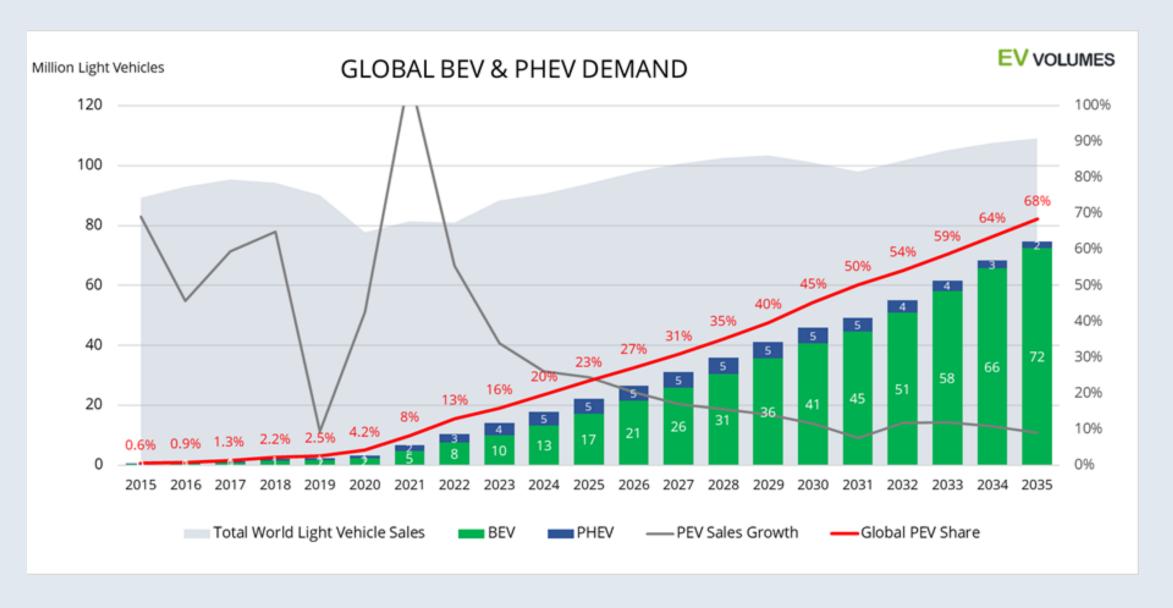


Fig: Global EV demand

src: https://www.ev-volumes.com/

#### Trends in EV market:

The CAGR of EV market is projected to be 13.7% and is expected to reach \$951.9 billion by 2030. With support from government, advancements in technology, increasing environmental concerns the EV market has gained sufficient traction as a viable transport alternative.

The Asia Pacific market is projected to reach 29,653 thousand units by 2023 at a CAGR of 19.0%.

Continuous developments in battery technology, body manufacturing, fast charging capabilities and cost reduction expected to lead to the growth of EV market

The market growth in EU is attributed to the presence of preestablished big automotive OEM's and EV component manufactures across the region. EU projects to sell 60% electric cars by 2030.

The FCEV's (fast charging electric vehicles) to be the fastest growing segment during forecast period. Consumer demand is increasing for FCEV's. Fuel cell are used in FCEV's to generate electricity for powering the vehicle.

Mid-priced EV segment to be the largest market during the Forecast period.

Asia Pacific to be the largest and the fastest growing market by value during forecast period.

Referring to consumer behavior, the reputation-driven consumers prefer to buy EV's only when its price is more than other vehicles. Also, Consumers are reluctant to buy EV's owing to its range limitations.

#### Players in EV market:

The Electric vehicle market is dominated by:

- 1.BYD (China)
- 2. Tesla (US)
- 3. Volkswagen AG (Germany)
- 4. SAIC Motors (China)
- 5. Stellantis (Netherlands)

These companies have best in class technology and have direct control over raw materials used in battery production.

# Approach and Challanges



DuckDuckGo API Search:
Use the DuckDuckGo API
 to search for links
 related to Canoo.

Filter yfinance Web
Links: Filter the
links to keep only
those related to
yfinance.

Extract Ticker using Regex: Apply regex to extract the ticker symbol from the link.

Use Ticker with yfinance Library:
Provide the extracted ticker to the yfinance library.

Filter Available
Tickers in yfinance:
Filter out tickers
for which data is
available in the
yfinance database.

Extract Symbols as Tickers: Extract ticker symbols for identified similar companies in the market.

Identify Keys for Extraction: Identify specific keys or data columns to extract from the financial data.

Extract Financials: Fetch financial data using yfinance.

Extract Historical
Data: Use yfinance
to extract
historical data
for the identified
tickers.

Plot Graphs on Financial Data: Create plots and graphs based on the financial data.

Identify
Competitors and
Plot Data:Identify
competitors from
the extracted
symbols and plot
their financial
data.

Save to CSV: Save the extracted and processed data to a CSV file.

END

Fig: Flowchart of approach used to solve problem

# Challenges

"Getting information off the Internet is like taking a drink from a firehose." -- Mitchell Kapor, co-founder of Lotus and the Electronic Frontier Foundation.

#### Challenge 1

Learning new libraries and implement it on our project.

#### Challenge 2

Identifying correct website to scrape in order to fetch appropriate data.

#### Challenge 3

Scraping dynamic website such as those related to finance world with data updating every second.

# Solutions

#### Solution 1:

Libraries such as Scrapy require time and are challenging to learn. It took some time to get it working on the webpage I intended. CSS selectors were tricky to implement. I was able to scrape the website of a book store, but it was challenging to apply on stock market analysis because financial data always keep on updating. BeautifulSoup and Yfinance were easier to comprehend than scrapy.

#### Solution 2:

There are many websites with information available, however some of them made it difficult to scrape because they contained pop-ups and advertisements. Certain websites featured connections to other websites created using entirely distinct CSS styles, and some even contained anti-scarping tools. As a result, it became essential to verify the CSS and programming language before scraping a website.

#### Solution 3:

Initially, I learned that the Nasdaq is a dynamic website that refreshes its data quickly—every minute. The index changed constantly, and the website went blank when I disabled JavaScript, indicating that JavaScript was running and the website was dynamic. It was therefore difficult to scrape. Following that, I conducted research and found the Yfinance Library using a combination of Beautifulscop and Yfianance. I came up with this solution of analysing Canoo.

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