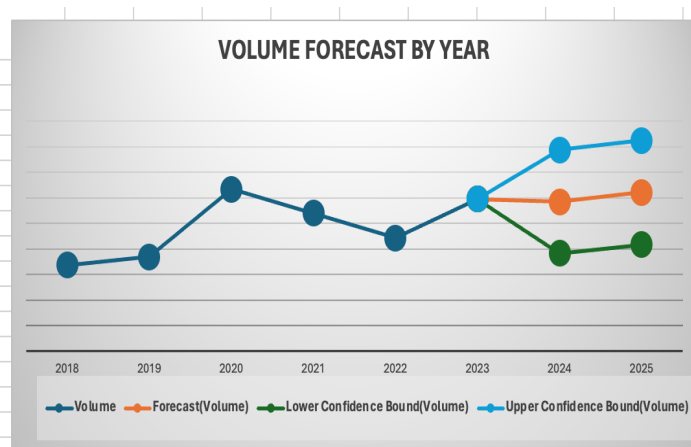# PROJECT 3
FINANCIAL FORECASTING

Apoorva Komatineni
Data Analyst

Objective: Develop a model to forecast financial metrics. Design the structure of the forecasting model in Excel. Use formulas for revenue projections and expense calculations. Implement VBA scripts for automation and complex calculations. Create charts for visual representation of financial forecasts.
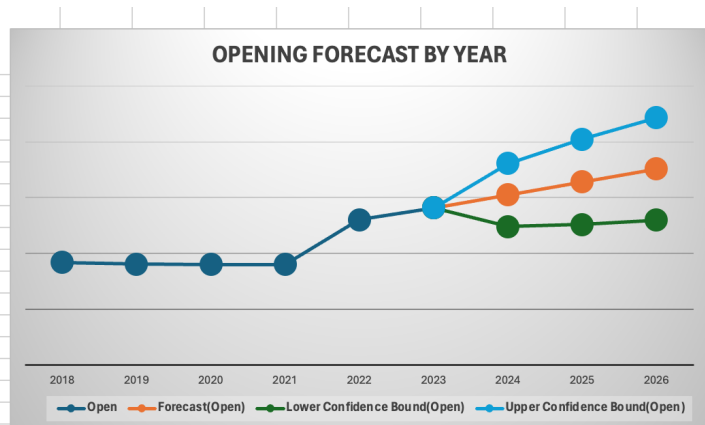
Observations:

VOLUMES FORECAST BY YEAR:

Year	Volume	Forecast(Volume)	Lower Confidence Bound(Volume)	Upper Confidence Bound(Volume)
2018	17.27628			
2019	17.33973			
2020	17.86885			
2021	17.68219			
2022	17.48767			
2023	17.79235	17.79234973	17.79	17.79
2024		17.77142254	17.37	18.18
2025		17.84279813	17.44	18.25

VOLUME FORECAST BY YEAR

- The actual volumes for the years 2018 to 2022 exhibit a gradual decrease.
- For 2024 and 2025, specific forecasted volumes are given (17.77 and 17.84, respectively), indicating a stable or slightly increasing trend.
- the data suggests a consistent or slightly increasing pattern in volume from 2023 onwards, with the forecast reasonably accurate for the available years.
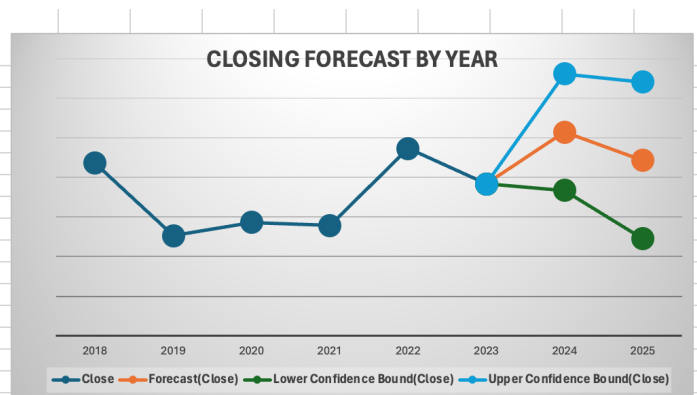
OPENING FORECAST BY YEAR:

Year	Open	Forecast(Open)	Lower Confidence Bound(Open)	Upper Confidence Bound(Open)
2018	91.8979			
2019	90.40822			
2020	90.20765			
2021	90.25753			
2022	130.3479			
2023	140.8224	140.8224044	140.82	140.82
2024		152.3941058	124.05	180.74
2025		164.1125807	125.96	202.27
2026		175.8310555	129.90	221.76

- The opening values show a relatively stable trend from 2018 to 2022.
- The forecasted opening values for 2024, 2025, and 2026 suggest a consistent increasing trend, with values of 152.39, 164.11, and 175.83, respectively.
- the data indicates a stable period followed by a forecasted upward trend in opening values from 2023 onwards.
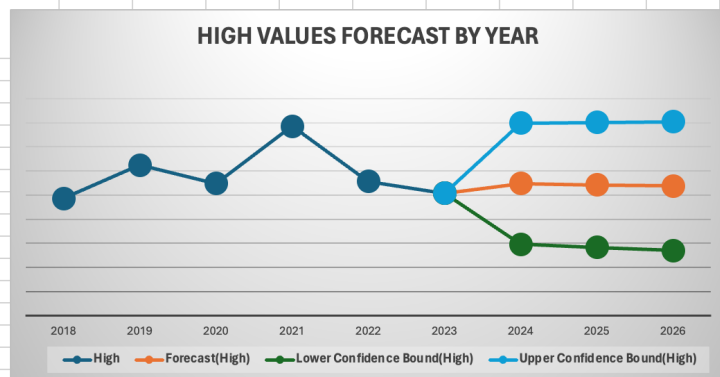
CLOSING FORECAST BY YEAR:

Year	Close	Forecast(Close)	Lower Confidence Bound(Close)	Upper Confidence Bound(Close)
2018	106.7297			
2019	103.0521			
2020	103.724			
2021	103.5808			
2022	107.4548			
2023	105.6803	105.6803279	105.68	105.68
2024		108.2893728	105.34	111.23
2025		106.8573501	102.89	110.82

- Closing values show a fluctuating trend from 2018 to 2022.
- The forecasted closing values for 2024 and 2025 suggest a slight increase, with values of 108.29 and 106.86, respectively.
- the data indicates some volatility in closing values from 2018 to 2022, with a forecasted stability in 2023 followed by a modest increase in the subsequent years.
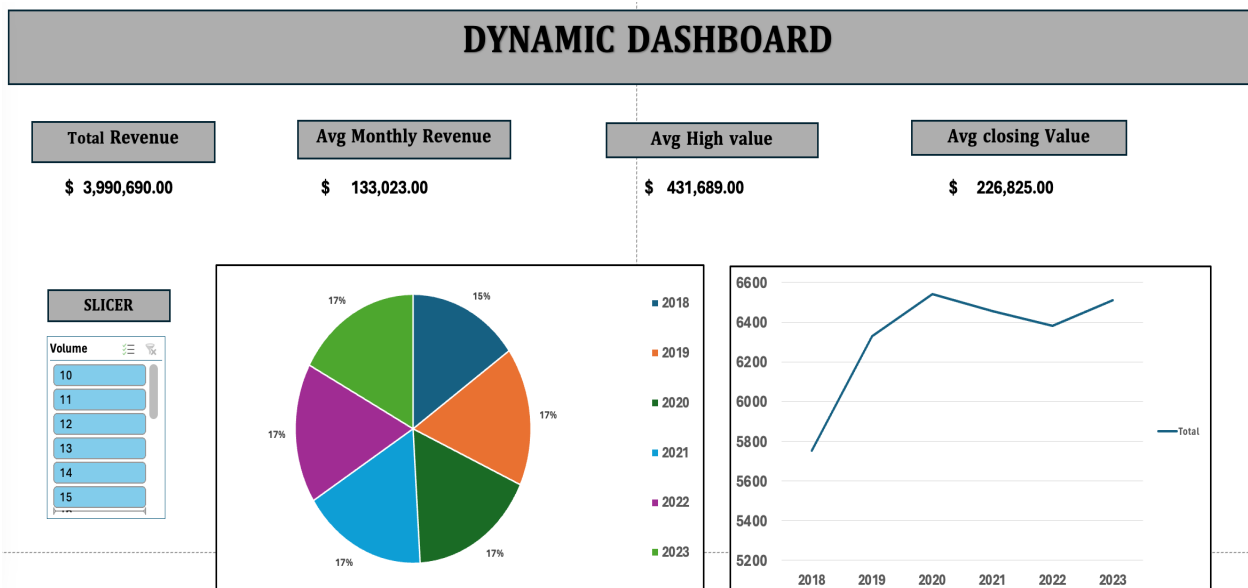
HIGH VALUES FORECAST BY YEAR

Year	High	Forecast(High)	Lower Confidence Bound(High)	Upper Confidence Bound(High)
2018	198.8589			
2019	200.2356			
2020	199.4727			
2021	201.8521			
2022	199.5589			
2023	199.0738	199.0737705	199.07	199.07
2024		199.472273	196.96	201.99
2025		199.4221961	196.83	202.02
2026		199.3721192	196.70	202.04

HIGH VALUES FORECAST BY YEAR

- High values show some fluctuation from 2018 to 2022, with a peak in 2021.
- In 2023, the actual high value matches the forecasted high value of 199.07.
- The forecasted high values for 2024 to 2026 suggest relative stability, with values of 199.47, 199.42, and 199.37, respectively.
- the data indicates a fluctuating trend in high values from 2018 to 2022, followed by a forecasted period of stability in the subsequent years.

DASHBOARDS:

DYNAMIC DASHBOARD

Total Revenue	Avg Monthly Revenue	Avg High value	Avg closing Value
$ 3,990,690.00	$ 133,023.00	$ 431,689.00	$ 226,825.00

SLICER

Volume
- 10
- 11
- 12
- 13
- 14
- 15

Pie chart: 15%, 17%, 17%, 17%, 17%, 17% — 2018, 2019, 2020, 2021, 2022, 2023

Line chart (Total): 2018–2023, values ranging 5200–6600