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Market value or market capitalisation data that I used starts from the first quarter of 2022. Market capitalisation is the value of the company that is traded on the stock market, and it is calculated by multiplying the share price and the number of outstanding shares. Outstanding shares are all shares of a corporation that have been purchased by investors and are held by them. The market value goes up and down because of the following:

- Investor expectation
When investors believe that the company will create more revenue, gain market share, and dominate its industry, investors buy more shares and the share price goes up therefore the market value increases.
- Company performance
When the company shows strong profits, it signals good management, strong business strategy and competitive advantage. This increases confidence and more investors will be attracted.
- Market sentiment
When the economy is favourable more investors notice and there would be more buyers than sellers. This also goes with periods of innovations like in this day and age, investors are investing most of their money to Artificial Intelligence (AI) so it's more likely given that tech companies are winning.

Questions before analysis

Post Covid-19 the world changed in many sectors. The adaptations, adjustments, and the level of decision making had to be rapid. The first question I had in my mind was just after Covid-19 which companies were thriving and what sector was doing well. How did the global superpowers look like after a very harsh period and were they growing, declining, or experiencing sudden jumps therefore being less predictable. But given all this the best question was what was in an investor's head because at the end of the day investors decide

where their money goes to therefore, I can compare them to someone who niche the sparks of the future.

To get answers to my questions looking at the market values was a smart choice. The market values that I explored were the 10 topmost valued companies on the market from the first quarter of 2022 to the 3rd quarter of 2025. The top 10 companies were all improving rather than staying on the same value and when looking at the top 10 I realised that the relationship between the market value and time was linearly with a growth rate of 403683.76 US-dollars per quarter. When looking at the scatter plot for the top 10 companies, the core AI leaders (tech) companies looked like outliers because of their sharp growth but also industrial era (AI limited) companies looked like outliers because of the significantly small growth. All companies had an improving growth but Nvidia had a booming growth. This is a result of AI, when one looks at the companies that lead on AI their growth reaches new heights every-time while the growth of industrial era companies is not as significant. This shows solid evidence of how impactful is AI on todays market.

The null hypothesis

The null hypothesis for this project was,
In this era tech companies outcompete industrial era companies by a land slide with the market value or market capitalisation being the strongest evidence.

After careful statistical calculations on Python for hypothesis testing, I failed to reject the null hypothesis. After statistical calculations I found that in fact tech are no longer competing, but they are redefining the competition in a way that this is not an evolution but a revolution.

Data issues

The N_A in the dataset do not represent unreported data but companies falling below the threshold for the top 10 rankings. Like when Exxon Mobil in later periods show more N_A, that does not mean they stopped reporting it means they fell out to be among the market value leaders. As a result, this is also evidence of the acceptance of the null hypothesis. I issue that one could take from the data is that it was extracted on a public website and the public could alter with the information presented in it.