Module 2 – VBA of Wall Street - Challenge

Overview of Project

Steve has just graduated with his finance degree. His first clients are going to be his parents, who want to invest in alternative energy (Green Energy). Without doing my research, Steve's parents invest all of their money into DAQO New Energy Corporation, a company who makes silicon wafers for solar panels. Steve has promised to look into DAQO's stock for his parents, but is concerned about diversifying their funds so he asks for our assistance and provides us with a list of companies who also offer alternative energy to compare DAQO's stock to theirs. Steve has asked us to use Visual Basic for Applications (VBA).

Ultimately, Steve wants to ensure that he is providing his parents with the best advice on what stocks to invest their money in to produce a maximum profit.

Results

The analysis focus on two years containing dataset, 2017 and 2018, both of which were analyzed in separate worksheets, "Stocks Analysis 2017," and "Stocks Analysis 2018," and one final worksheet titled "All Stocks Analysis." To ensure that Steve can easily run his data analysis between the years 2017 and 2018 without having to leave the All Stocks Analysis worksheet, we added an Input Box for convenience to assist him in moving back and forth between the years. Our assistance for Steve culminates in a comprehensive analysis of the dataset to best support Steve and his parents in making their financial decision.

Using Visual Basic for Applications (VBA) Code (page 1 and page 2), I was able to write code that allowed for a thorough analysis of the dataset. Company stocks were analyzed using the following categories: Date, Open, High, Low, Close, Adj. Close, and Volume. During an initial overview of the 2017 and 2018 datasets, I determined that DAQO New Energy Corporation stock yielded a total daily volume of 35,796,200, and a return percentage of 199.4% in 2017 and initially appeared a wise financial investment. However, in 2018, the DAQO stock plummeted to yield a total daily volume of 107,873,900, and a return percentage of -62.6%. I am now in a position to recommend to Steve that his parents sell their stock with DAQO. In addition, I am recommending to Steve that his parents invest in ENPH stock, which yielded a total daily volume of 607,473,500, and a return percentage of 81.9% in 2018, or RUN stock, which yielded a total daily volume of 502,757,100, and a return percentage of 84.0% in 2018. Both would be wise financial investments for Steve's parents based on their return percentage.

Summary

Overall, the advantages and disadvantages of refactoring code weighted heavily on the advice that we provided to Steve for the investment options of his parents. The advantage of refactoring code in VBA to analyze the data was that it saved valuable time since the number of companies whose stock we were analyzing included input in rows ranging from 2 to 3013. However, the limitations included a great amount of time to refactor the code to produce our results, which also may have been yielded by just using functions within Microsoft Excel itself.

While the original script in VBA did provide us with basic elements of the All Stocks Analysis sheet, the refactored code did allow us to accurately extract information from a large dataset within the 2017 and 2018 worksheets. Refactoring also allowed us to conditionally format data for quick comparison, and it allowed us to insert buttons and an Input Box to expedite our analysis. Doing so allowed us to make an educated recommendation to Steve for his parent's future financial investments.