

# Business Intelligence Tool & Company Analysis

## Task:

Use the company and/or industry data discussed in the class session to create visualizations that best answer the below questions. Once your visualizations are completed, submit a Power BI dashboard with the visuals you selected. Reflect on the decisions that were made. Write 1-3 sentences on your rationale for choosing each of the visualizations you did.

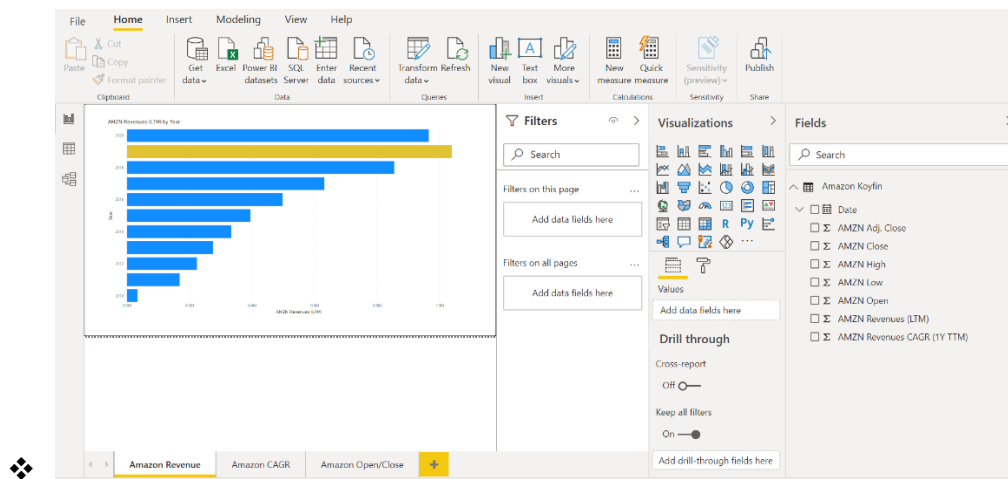
- Find and download pertinent data from KoyFin.com to help build your visualizations,
- There is no one ‘right’ answer for these questions. The important thing is the rationale behind your choice to use a particular visualization.
- Have fun with this! Create more visualizations if you feel inclined to do so.

**\*There is no “right” answer to any of these questions. Use this assignment as a tool to guide your students to making the best decisions to visually represent their findings.**

## Question 1:

Between December 31, 2010 and September 30, 2020 which year showed the most revenue for Amazon?

- ❖ The field(s) to use to get this answer: AMZN Revenues (LTM) and Date
- ❖ A potential answer is: Clustered bar chart (in below picture)
- ❖ Answer: 2019

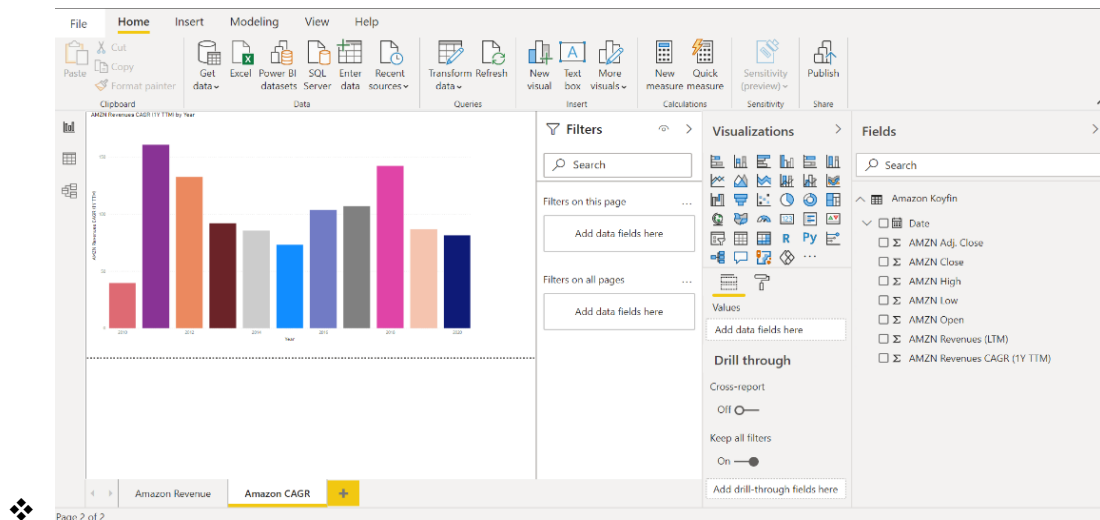


- ❖ For this question, students tend to pick the stacked bar chart, the stacked column chart, the clustered bar chart, or the clustered column chart. These are all great answers because they provide a clear answer to the question. There are visualizations that would not make sense here, such as the funnel which visually does not indicate the answer.

## **Question 2:**

Between December 31, 2010 and September 30, 2020 which year showed the least compound annual growth rate (CAGR) for Amazon?

- ❖ The field(s) to use to get this answer: AMZN Revenues CAGR (1Y TTM) and Date
- ❖ A potential answer is: Clustered column chart (in below picture)
- ❖ Answer: 2010/39.56

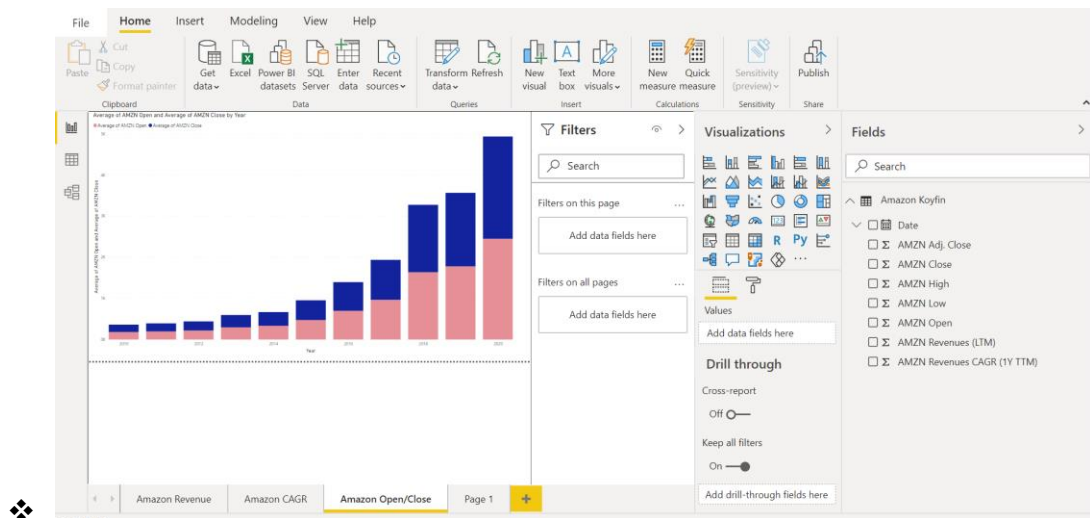


- ❖ For this question, students tend to think the question is harder than it is and will try to add in the AMZN revenue field which is not needed in this case. In terms of visualizations, many can apply here such as the usual column and bar charts referenced in the first question. A scatterplot may also be something that would relay the answer visually so answers may vary. For this question, paying attention to the rationale of the student and the conveyance of the answer through the visual is key.

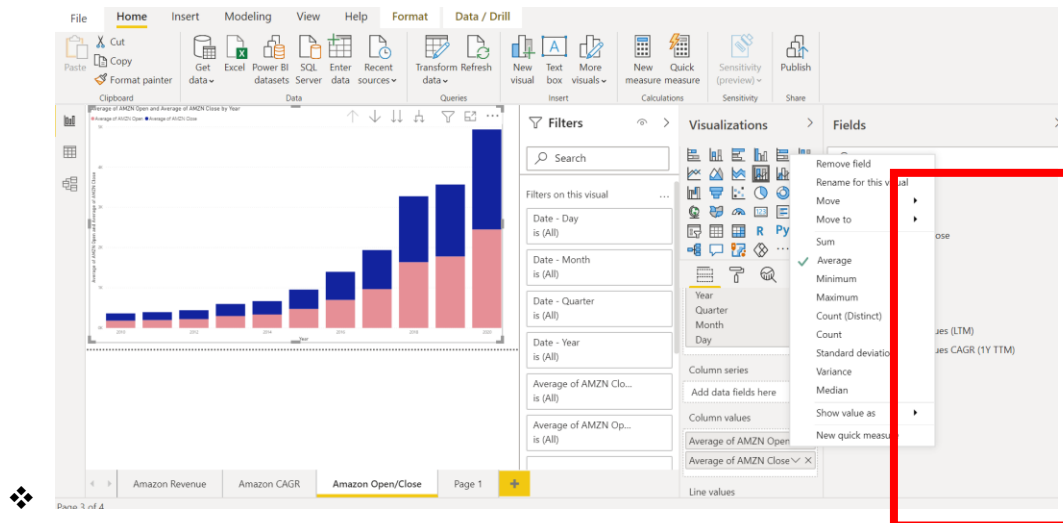
### Question 3:

Between December 31, 2010 and September 30, 2020 what were Amazon's 2019 Open and Close prices?

- ❖ The field(s) to use to get this answer: AMZN Open, AMZN Close and Date
- ❖ A potential answer is: Stacked Column Chart (in below picture).
- ❖ Answers: Amazon Average Open 2019: \$1,777.32/Amazon Average Close 2019: \$1786.62



- ❖ For this question, I find the students tend to get a bit creative. The right fields are usually chosen so the students instead focus on choosing the 'right' visual. To get to the average, the students have to edit the value of each field, changing the value from the default 'Sum' to 'Average'. This is detailed in the below picture.



## Sample Dashboard (after being published on Power BI):

- ❖ Note: In this dashboard, there are a few added visualizations to provide a bit of context. Your students do not have to do this, but kudos if they do!

