BUSINESS ANALYTICS: DATA ANALYSIS AND STORYTELLING FOR BUSINESS



INVESTMENT OPPORTUNITIES EXERCISE

For this exercise, students are junior analysts at a large investment firm. Their manager wants them to perform preliminary due diligence on a list of companies to identify businesses the company would be interested in purchasing. The firm requires companies to meet specific criteria to be considered for purchase. Those criteria include:

- Revenue greater than or equal to \$40 million
- · Growth greater than or equal to 100%

The investment firm wants to make three acquisitions, each in a different industry to better diversify its portfolio. The firm is interested in the following industries:

- Education
- IT Services
- Telecommunications

The students' manager gives them a CSV file (linked below) that has information about Inc. 5000 companies. They will use Excel to sort the data in the file to produce a list of target companies that meet the required criteria for the three industries listed. Explain that a senior analyst would use the data the students collect to perform more in-depth due diligence on each of the potential acquisition targets.

Exercise Instructions

To complete the exercise, students will need to organize the data in the CSV file using the following functions/tools in Excel.

- IF
- AND
- Pivot Tables

Students will use the IF and AND functions to "flag" companies that meet the specified criteria. To do this, they should create a new column to the right of the data and write "Is Match" (or something similar) in the header cell.

The "Is Match" column should contain a formula students create that "flags" the correct data in the sheet. Students should start the formula with an IF function followed by an AND function, which will verify that BOTH the revenue and growth of a company match the two criteria shown above.



Explain to students that while writing this formula they should be sure to NOT HARDCODE DATA. It's common for a firm or a manager to change the analysis criteria.

When defining the "true" and "false" outcomes that the function will generate, students should pick something simple like a "1" for true and a "0" for false. Students will use these "true" and "false" outputs to sort the data while performing the exercise. Once this function is populated in every row of the new column, this "flagging" portion of the exercise has been completed. The data will then need to be pulled into a pivot table for sorting.

In a new worksheet, students will create a pivot table that references all the existing data, including the new column filled with the "flagging" function. Next, they will complete the following to define what the table has generated:

- Place the company name and industry in the rows field (shown in the pivot table as rows)
- Place the revenue and growth in the values field (shown in the pivot table as columns)

After students have set up their pivot tables with the above criteria, they should create two slicers that will allow them to filter data into groups that only match the purchase criteria and industry. The reduced list is what students will submit for this exercise.

Exercise File

Below is the file students will use to complete this exercise.

Inc 5000 Company Data

Instructor Answer

Below is the answer key.

Investment Opportunities Exercise Answer Key

When you open the file, the first thing you will see is the sorted raw data. If you scroll to the right, you will see the criteria used to sort the raw data in this exercise. Underneath that, you will see the list of companies students should submit when they complete the exercise. Students do not need to list the revenue and growth percentage with the company name as it is shown in the tab.

Glossary

Absolute References **Explained**

AND Function Explained

Due diligence – A rigorous process that determines whether or not the venture capital fund or another investor will invest in a company.

Hardcoding **Explained**

IF Function **Explained**

Pivot Tables **Explained**

Slicers **Explained**

