Exploration 6B: Stock Investment Decisions

You have just started working for a new company – Impressive Business Machinery. As part of the paperwork for your hiring, you have been asked to choose an investment stock for your retirement planning. Your employer offers you four choices and provides you with histograms of the daily returns for these stocks over the last 3 months. (You suspect that your employer is testing you, but you can’t be sure.) For the near future, which of these stocks would you choose? Why would you choose that stock? How will you justify your decision to your family if it does not perform as well as expected?

1. Which stock did you choose? Why?
2. Discuss your ideas with a partner. Do you still agree that your original choice of stock was the best?
   1. If your ideas have changed, what influenced those changes?
   2. If your ideas have not changed, what strengthened them?
3. What makes the selection of a stock easy? What makes it difficult?

It may be helpful to sketch the cumulative distribution and a boxplot for each of the stocks. Each graph contains 90 observations (about three month’s worth of data). It will also be helpful to rank the four stocks from highest to lowest in terms of both the mean and the standard deviation.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Statistic** | **Highest** | **Med-High** | **Med-Low** | **Lowest** |
| Mean |  |  |  |  |
| Standard Deviation |  |  |  |  |
| Minimum |  |  |  |  |
| First Quartile |  |  |  |  |
| Median |  |  |  |  |
| Third Quartile |  |  |  |  |
| Maximum |  |  |  |  |

1. After sketching your graphs and completing your estimates, has your decision as to which stock to select changed? Why or why not?
2. Does your selection of a stock depend on what your investment goals are? In what way?

