Introductions & Regression Refresher

Summary

Review linear modeling and class introduction.

Key Points

Iceberg

1) Modeling is not what you see, but you can't see.
2) The example given was an iceberg
    a) The ices 92% densely so we can only see 8%
3) Make sure to think about what you don't see

Sales Model

1) Given sales, tv, paper, online ad spend help predict sales.
2) The result was that the model was overfitted.
3) Sales has many factors that were not in the dataset.
    a) It is not what you see, but what you don't see.

Model steps

1) Problem statement
2) Domain knowledge
3) Define Variables
4) Model specification

Professional Way of doing OLS

1.) Most real-world at is dirty and incomplete
    a.) Garbage data = garbage result

2.) Realize that complex world full of non-linear relationships where variables are often interdependent (sometimes on error).
3.) P-values and R-sq are the least of our cons
4) Make sure to think about what you don't see could be most important
    a) The example given was an iceberg
        i) The ices 92% densely so we can only see 8%

[topic 1]

1) [text]
2) [text]
3) [text]

Key Terms

Spurious - not being what it purports to be; false or fake.: "separating authentic and spurious claims". Example - This model has Spurious correlations.

Stochastic - randomly determined; having a random probability distribution or pattern that may be analyzed statistically but may not be predicted precisely. Example - Height of distributions humans.

Economic Significance - The statistical significance and the economic effect inherent in the decision made after data analysis and testing.