Using COVID-19 Examples in Business Analytics

Dr. Janet Fraser

Teaching in the New Normal

5/22/2020
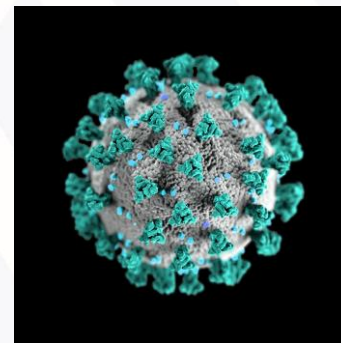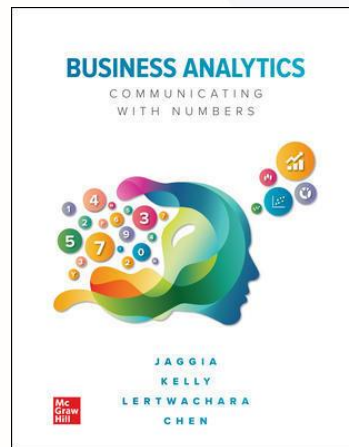
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Things Change

- 75% of offerings hybrid or online

- Students have mixed feelings

- Living on the edge

- Engaging with the changes

when we cant go to school due to covid-19
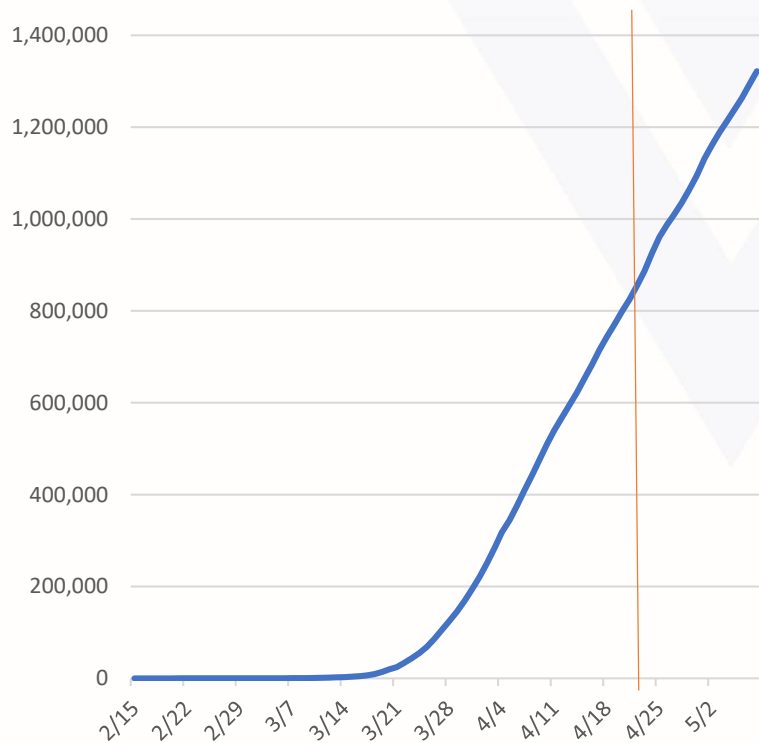
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COVID-19 in the Coursework

- BADM 556: Data Analytics for Management

- BUDA 452/BUDA 545: Business Data Simulation
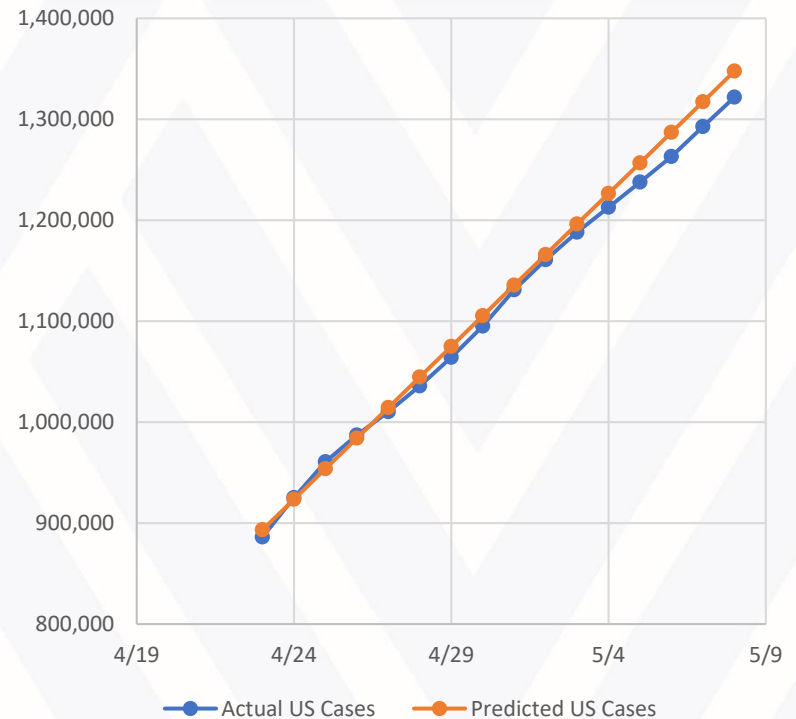
- BADM 611: Business Research Methods

Data Analytics for Management
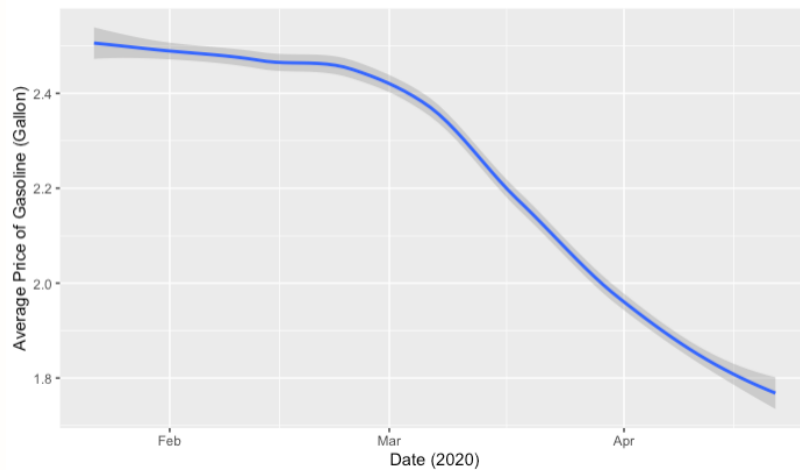

Actual US Cases
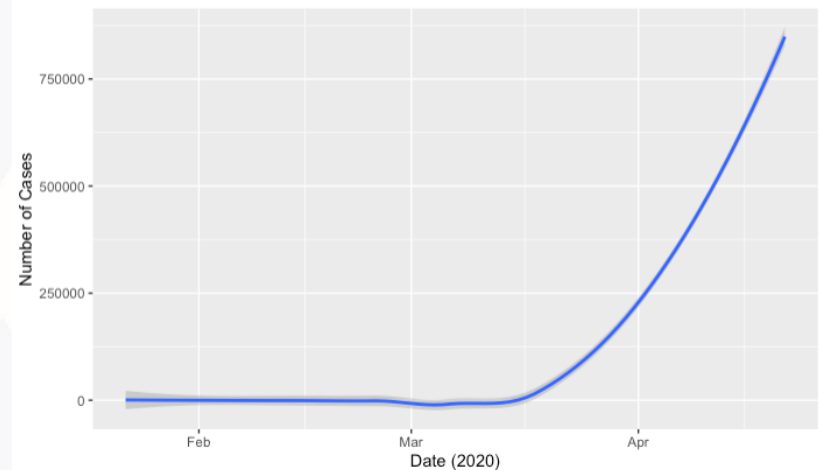
Actual and Predicted COVID-19 Cases

Data Analytics for Management

Price of Gas Over Time — Average Price of Gasoline (Gallon) vs. Date (2020)

U.S. Covid-19 Cases Over Time — Number of Cases vs. Date (2020)

Data Analytics for Management
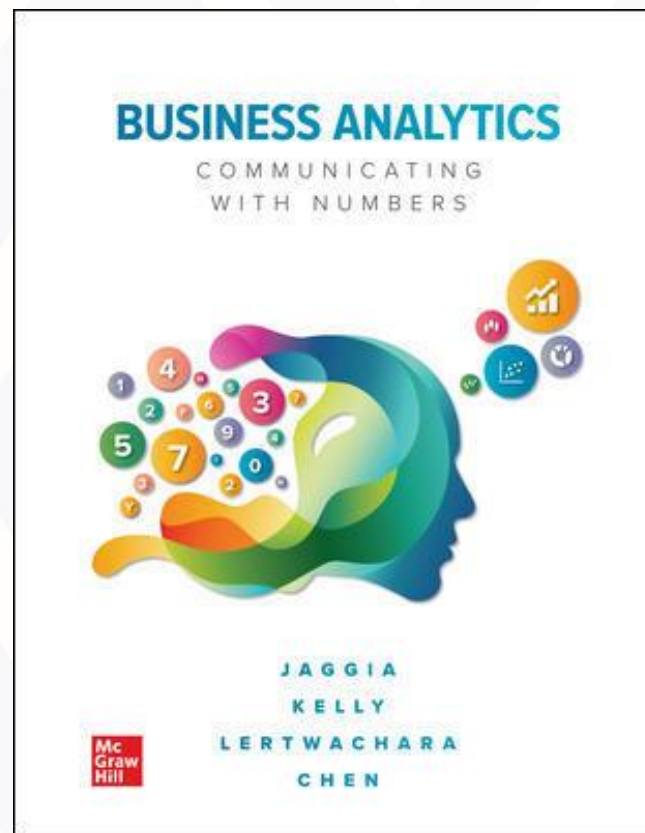

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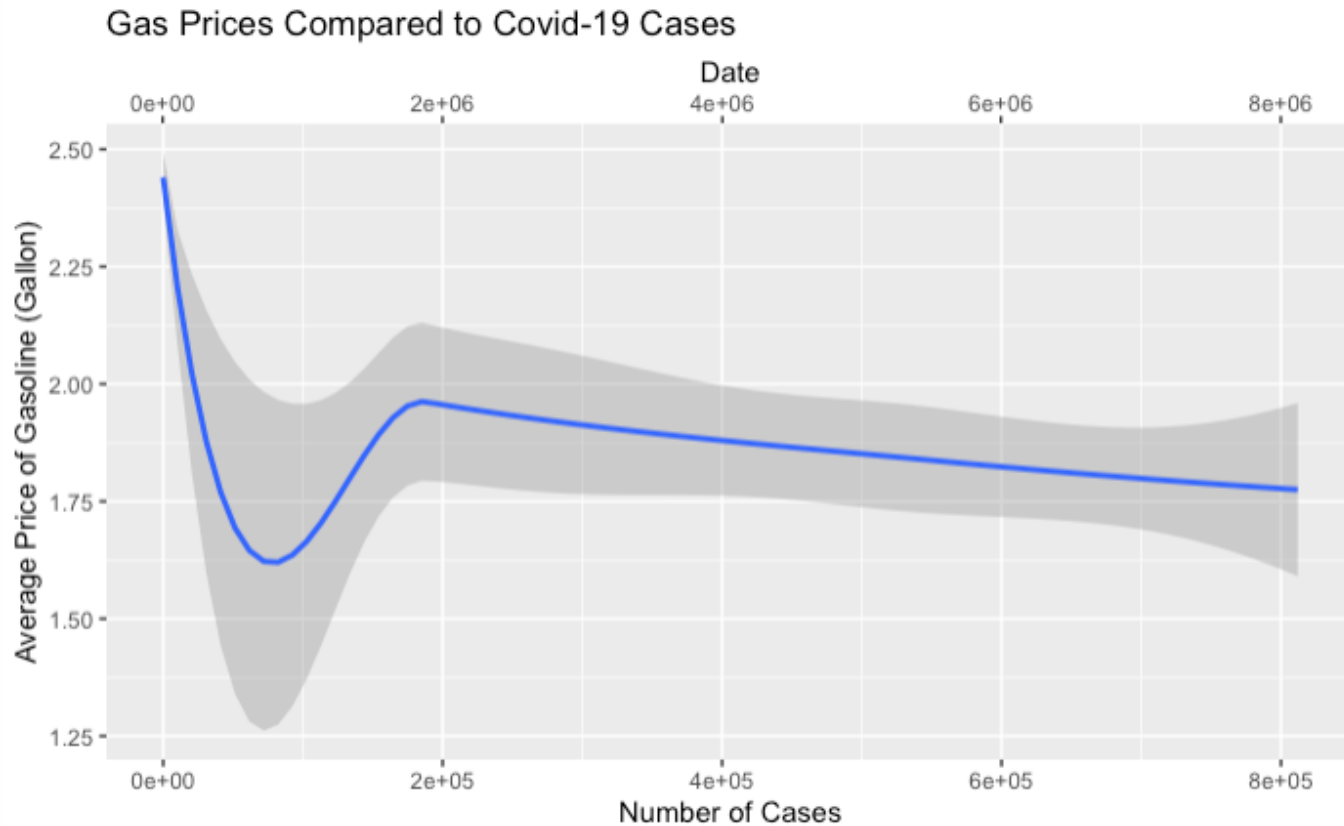
Business Data Simulation
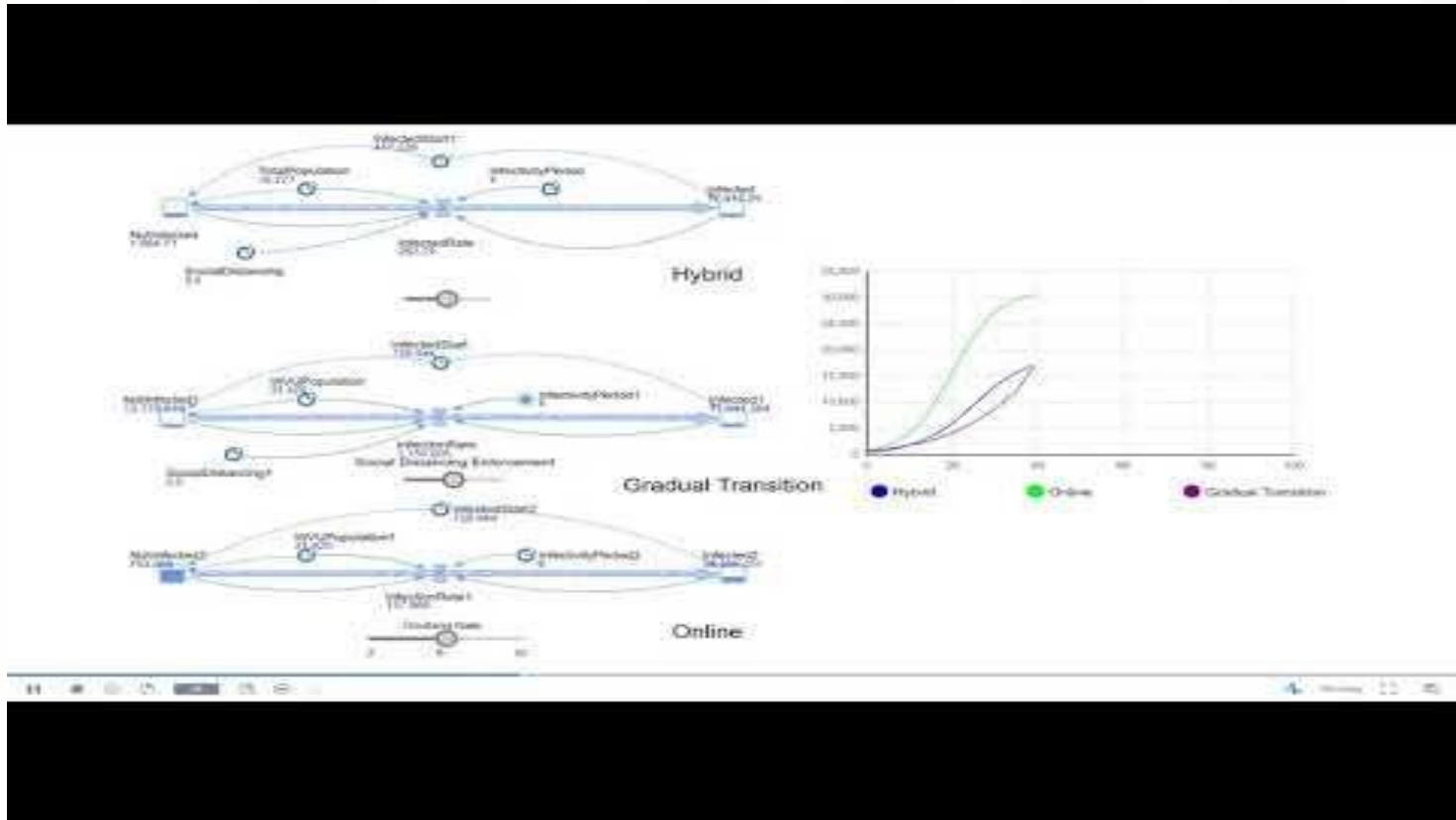
Business Research Methods

- Chapter 1: Introduction to Business Analytics

- Chapter 2: Data Management and Wrangling

- Chapter 3: Data Visualization and Summary Measures

- Chapter 5: Statistical Inference

- Chapter 6: Regression Analysis

- Chapter 7: Advanced Regression Analysis

- Chapter 12: Forecasting with Time Series Data

- Chapter 8: Introduction to Data Mining

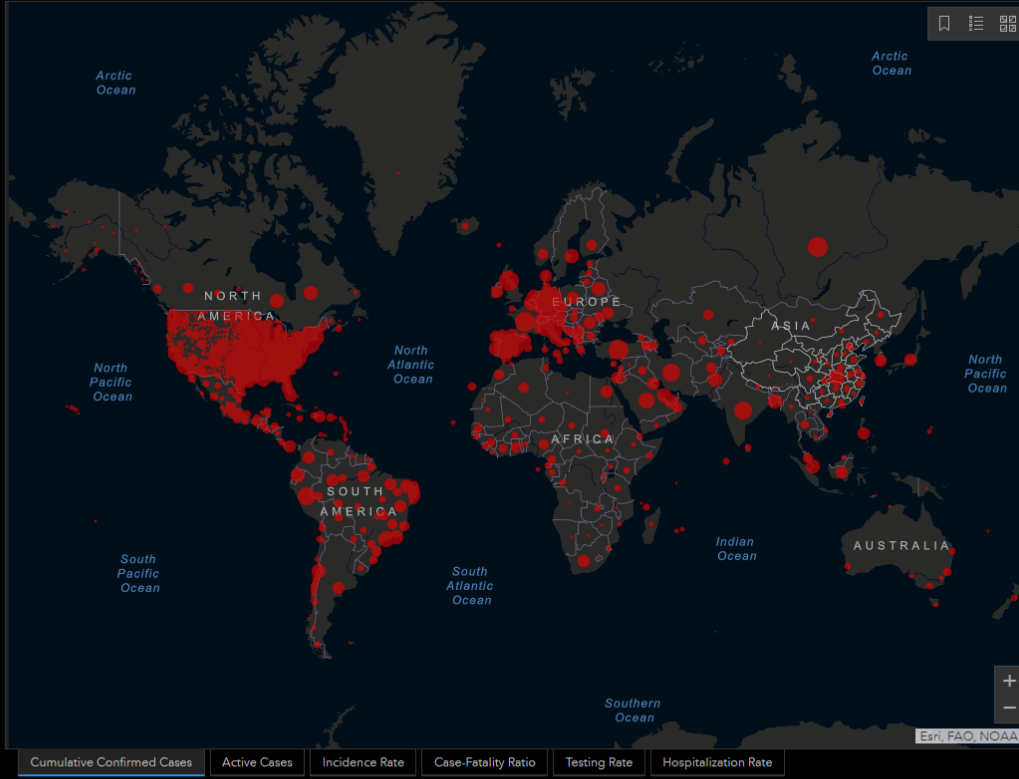- *Chapter 10: Supervised Data Mining: Decision Trees*

Google Cloud Platform: COVID-19 Public Datasets

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Applications

- Five applications of COVID-19 alongside Business Analytics:
    1. Apply concepts of data wrangling
    2. Identify different types of variables (e.g. continuous, discrete, binary, categorical)
    3. Learn methods to evaluate different types of variables and when each method is appropriate
    4. Develop and use time series models to predict the number of future cases of COVID-19
    5. Develop and use logistic regression to evaluate an individual's risk of contracting COVID-19

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Questions and ideas

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