



# Predicting SaaS Revenue Multiples

Intro to Data Science and Machine Learning

Group 16



# Revenue Multiples

4b

Enterprise Value

MARKET CAP MINUS CASH PLUS DEBT

200m

TTM Revenue

BASED ON SEC FILINGS

20x

EV/TTM



# Software as a Service

- Users access the software through their internet browser
- Generally the users are business and not consumers
- Example 1: Zoom
- Example 2: Shopify
- Ford = 1.11
- Shopify = 11.26

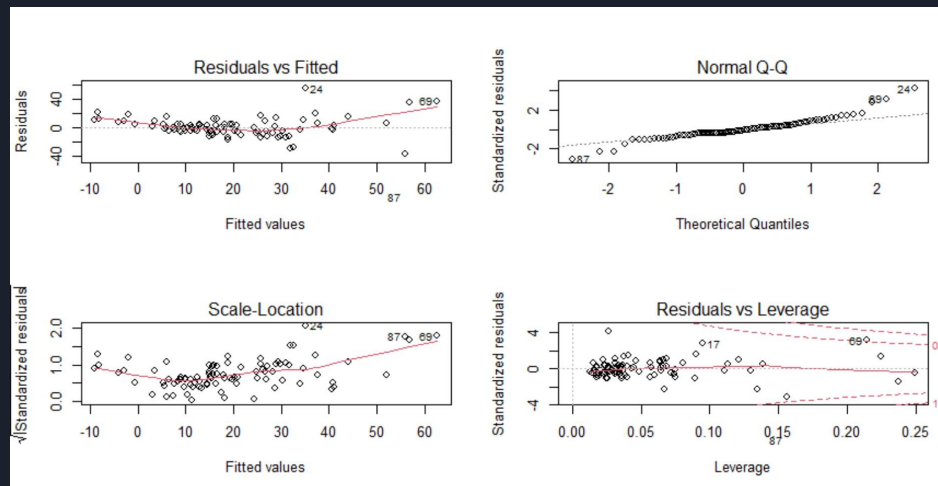


# Data Set

- 90 companies from the SEG SaaS Index
- Response: TTM Multiple
- Predictor 1: YOY Revenue Growth %
- Predictor 2: EBITDA Margin %
- Predictor 3: Sales Efficiency %
- Predictor 4: Gross Margin %

# Linear Regression

- Multiple Linear Regression was best model
- $-23.688 + 40.315 * \text{rev\_growth} + 11.526 * \text{sales\_efficiency} + -16.316 * \text{ebitda\_margin} + 32.586 * \text{gross\_margin}$



# Random Forest

- Cross Validation MSE= 10.74447
- Random Forest MSE=15.06094
- Boosting MSE=13.32366

