

# Business Analytics

## Yelp: “Startup Survival Kit”

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## INTRODUCTION

Technical report of our presentation Yelp: “Startup Survival Kit”. All necessary R files are attached along with a brief explanation in this file.

### Data handling

We handled the data from Yelp through different steps:

#### 1. Data Access

The files are readily available here: [https://www.yelp.com/dataset\\_challenge/dataset](https://www.yelp.com/dataset_challenge/dataset)

## 2. Data Conversion

We transformed the files from Yelp using the “json\_to\_csv\_converter.py” which can be found here: <https://github.com/Yelp/dataset-examples>

## 3. Data Consolidation and Reduction

- a. Yelp\_Data\_Handling.r (Attached)

## Linear Regression

Yelp\_Data\_LinearRegression.r (Attached)

The model was generated in R and then we cross checked with Rattle. The decision tree was not able to arrive at a solution in rStudio and Rattle was used instead.

## Text Analysis

### 1. Data Preparation

We used a Python script by Ryo Kita ([available here](#)) to parse the yelp dataset for easier analysis in R.

### 2. Data Analysis

Yelp\_Data\_Text\_Analysis.r (Attached)

### 3. Data Visualization

All charts were plotted again using Tableau, R and Raw (<http://raw.densitydesign.org>)

### 4. Web Visualization

The web visualization was done with Shiny (<http://shiny.rstudio.com>). We start the server with the function runApp()

- a. ui.R (Attached)
- b. server.R (Attached)