



DATA ANALYSIS AND MODELING REPORT

Some Model

Prepared by:
JIM CROZIER

Client:
MAILCHIMP DATA SCIENCE

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0.1 Overview

Example text

- Move data into Hive and Spark from Postgres + R
- Generate dependent variable and feature set
- Fit models and test for accuracy
 - Test LM, Logistic, Random Forest, Gradient Descent
 - Test using all data vs history and no-history
 - Test variety of feature sets

0.2 Exploratory Data Analysis

0.2.1 Sends Data

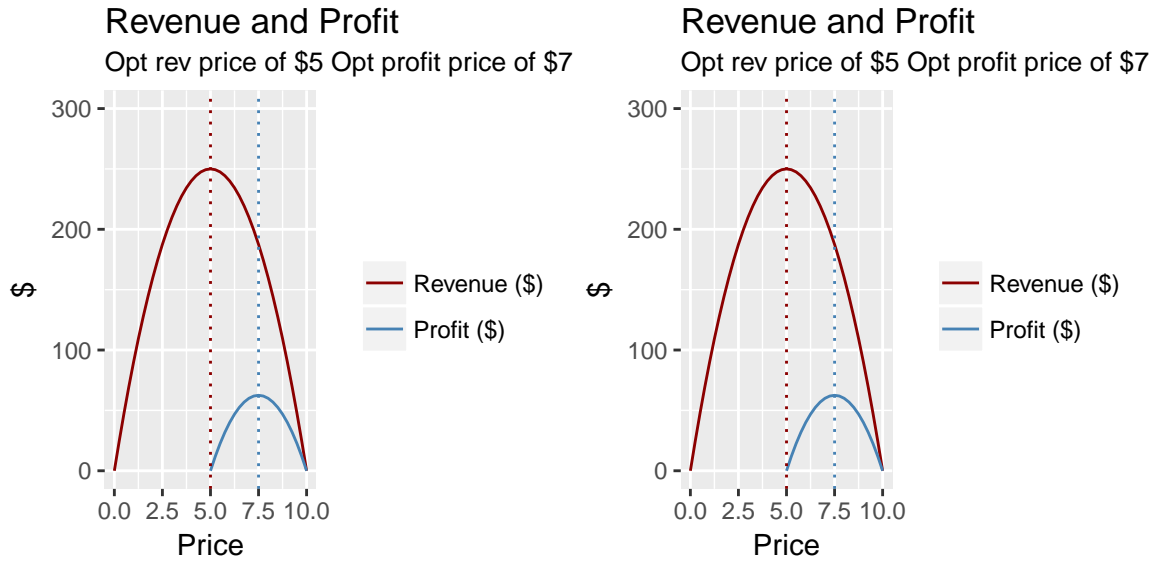
The raw dataset included limited data from May of 2016 to July of 2017...

```
## Warning: Removed 20 rows containing missing values (geom_path).
```

For the analytical dataset I cut the data down to July, 2016 - April, 2017

```
## Warning: Removed 20 rows containing missing values (geom_path).
```

```
## Warning: Removed 20 rows containing missing values (geom_path).
```



0.3 Analytical Dataset

0.3.1 Dependent Variable

0.3.1.1 Some subsection

Table 1: Top Line Domain

	q	p	rev	profit
1	100.00	0.00	0.00	-500.00
2	90.00	1.00	90.00	-360.00
3	80.00	2.00	160.00	-240.00
4	70.00	3.00	210.00	-140.00
5	60.00	4.00	240.00	-60.00
6	50.00	5.00	250.00	0.00
7	40.00	6.00	240.00	40.00
8	30.00	7.00	210.00	60.00
9	20.00	8.00	160.00	60.00
10	10.00	9.00	90.00	40.00
11	0.00	10.00	0.00	0.00

0.3.2 Model

$$\Pr(\text{Event} = 1 \mid \mathbf{X}) = \frac{\exp(\beta_0 + \beta_1 \text{Gender} + \beta_2 \text{Age} + \dots + \beta_{12} \text{immigration})}{1 + \exp(\beta_0 + \beta_1 \text{Gender} + \beta_2 \text{Age} + \dots + \beta_{12} \text{immigration})} \quad (1)$$

0.3.3 Some Subsection

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language.

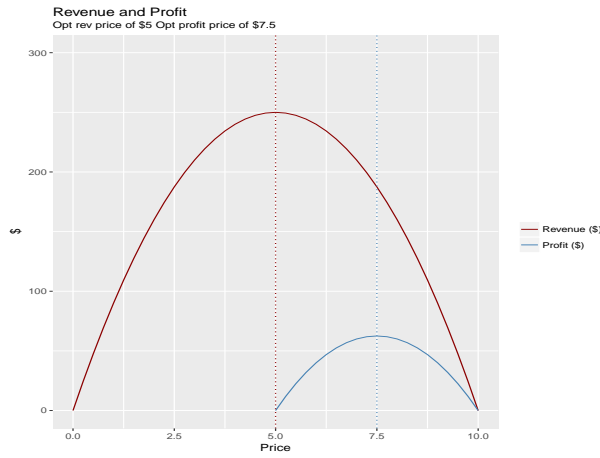


Figure 1: Model 1 Importance

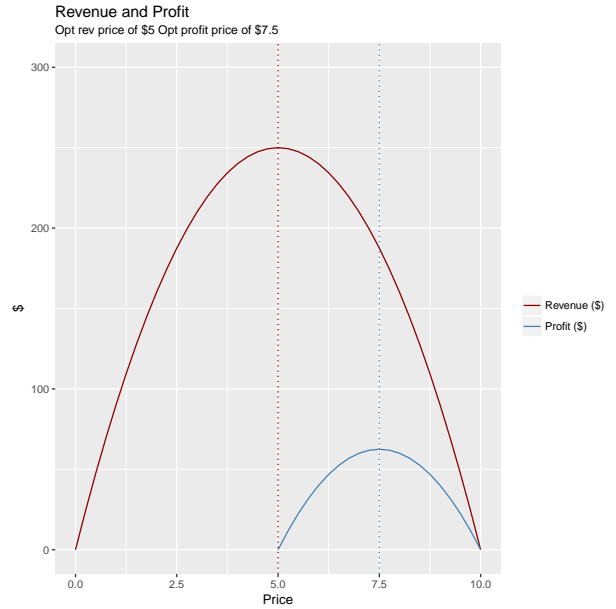


Figure 2: Model 1 Effects

Hello, here is some text without a meaning. This text should show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like “Huardest gefburn”? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should match the language.