

# NEWS POPULARITY ON DIFFERENT PLATFORMS

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**Why important?**





**Where to post?**

**What to post?**

**When to post?**





**News Popularity**





**What to post?**

**When to post?**

**Where to post?**  
**(classification)**





# Data Description

- Features:

1. Publish Date
2. Topic (economics, Obama, Microsoft, Palestine)
3. Title / Sentiment Title (No need to preprocess)
4. Headline / Sentiment Headline (No need to preprocess)
5. News popularity on different platforms (Facebook, GooglePlus, LinkedIn)

\* No missing value in the dataset.



# Categorical features

- Features:

1. Publish Date

2. **Topic (economics, Obama, Microsoft, Palestine)**

**OneHotEncoder:**

**'x0\_economy', 'x0\_microsoft', 'x0\_obama', 'x0\_palestine'**

3. Title / Sentiment Title

4. Headline / Sentiment Headline

5. News popularity on different platforms (Facebook, GooglePlus, LinkedIn)



# Continuous features

- Features:

1. **Publish Date**  
Unix time
2. Topic (economics, Obama, Microsoft, Palestine)
3. Title / Sentiment Title
4. Headline / Sentiment Headline
5. **News popularity on different platforms (Facebook, GooglePlus, LinkedIn)**

**They are all reasonably bounded. Thus, MinMaxScaler!**





# Label

- Features:

1. Publish Date
2. Topic
3. Title / Sentiment Title
4. Headline / Sentiment Headline
5. **News popularity on different platforms (Facebook, GooglePlus, LinkedIn)**



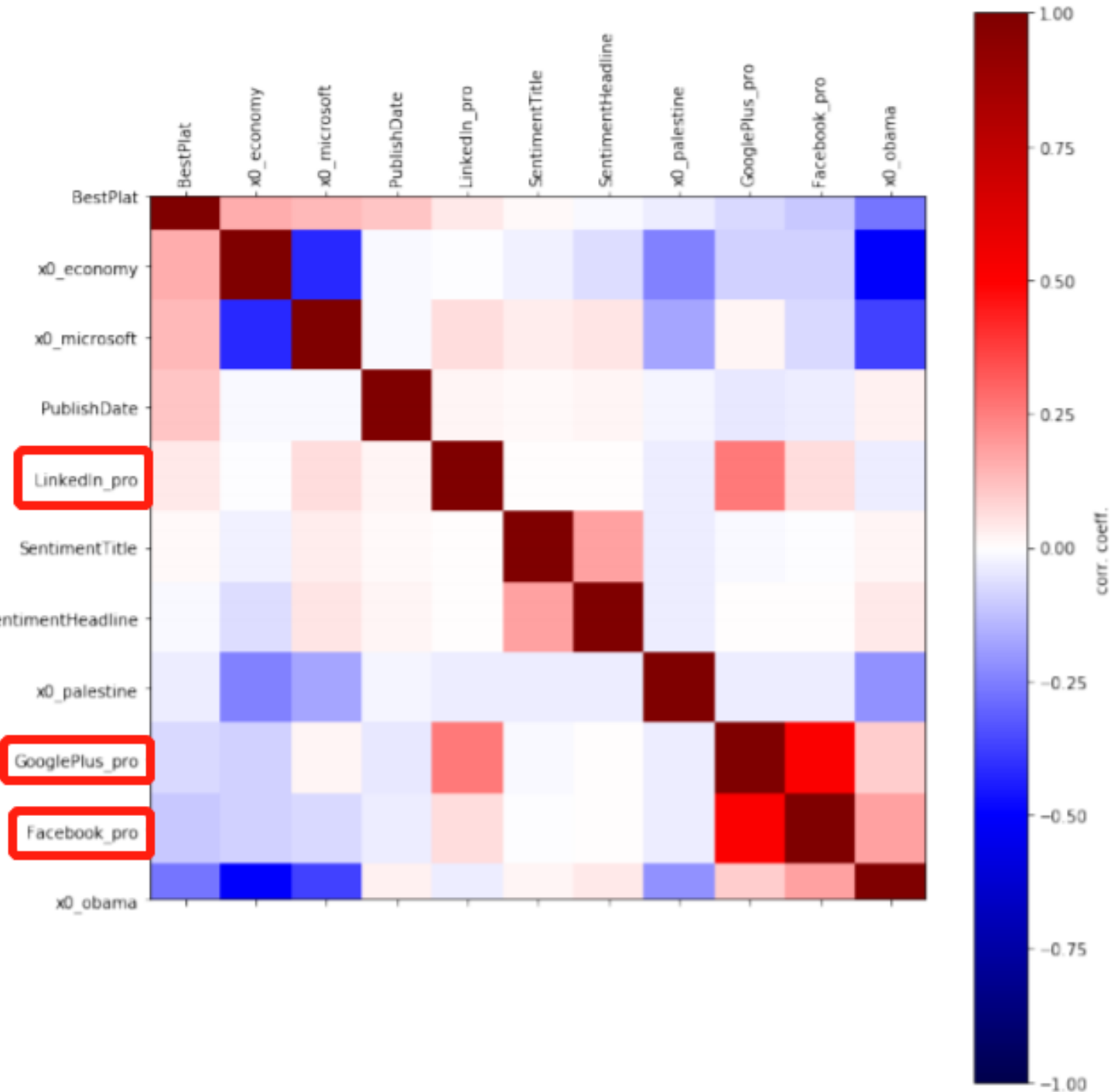
# Data Preprocessing:

- No missing value in the dataset.
- Resulting dataset:

```
df.shape
```

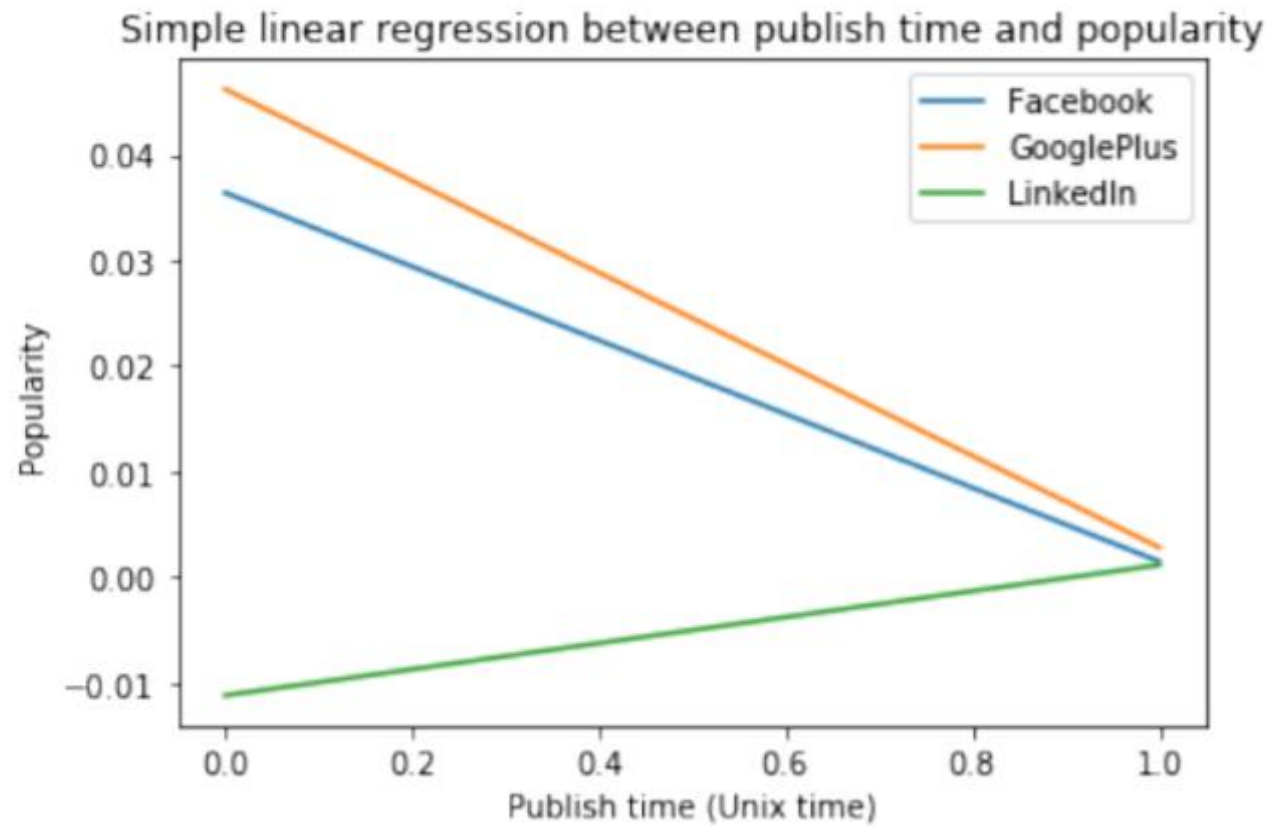
```
(93239, 16)
```





# Exploratory Data Analysis

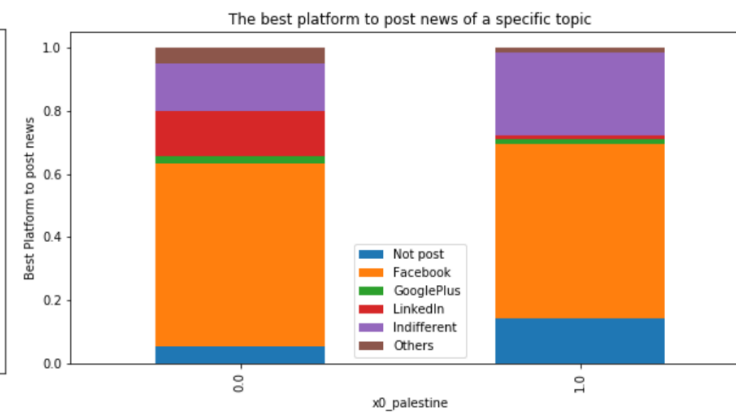
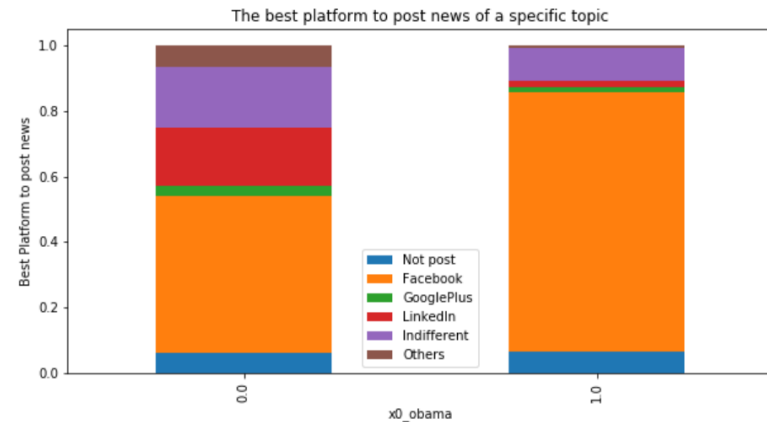
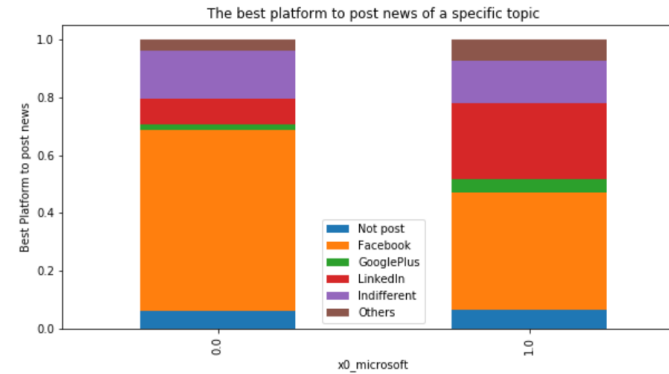
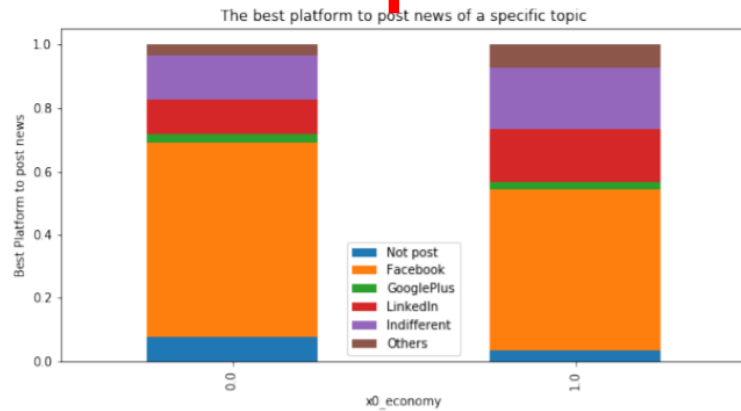




# Exploratory Data Analysis

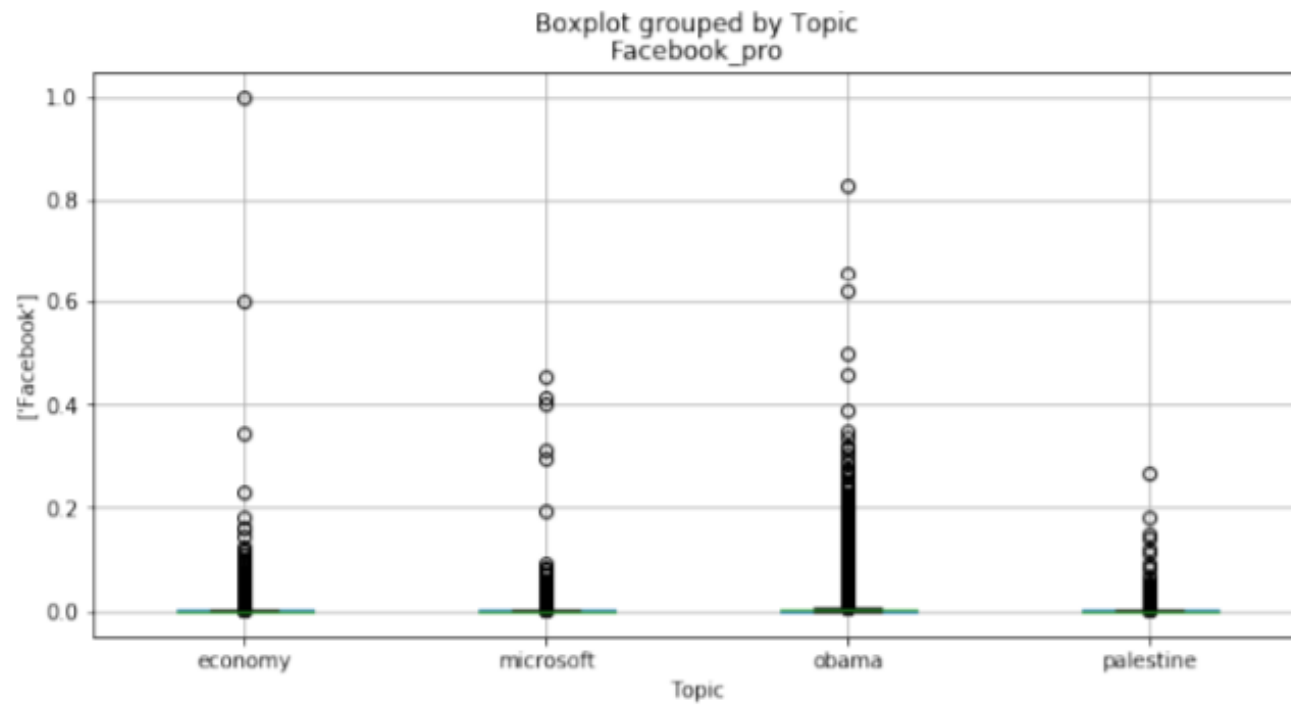


$P(\text{choose Facebook as final platform} \mid \text{topic} = \text{economy}) < P(\text{choose Facebook as final platform} \mid \text{topic} \neq \text{economy})$



# Exploratory Data Analysis

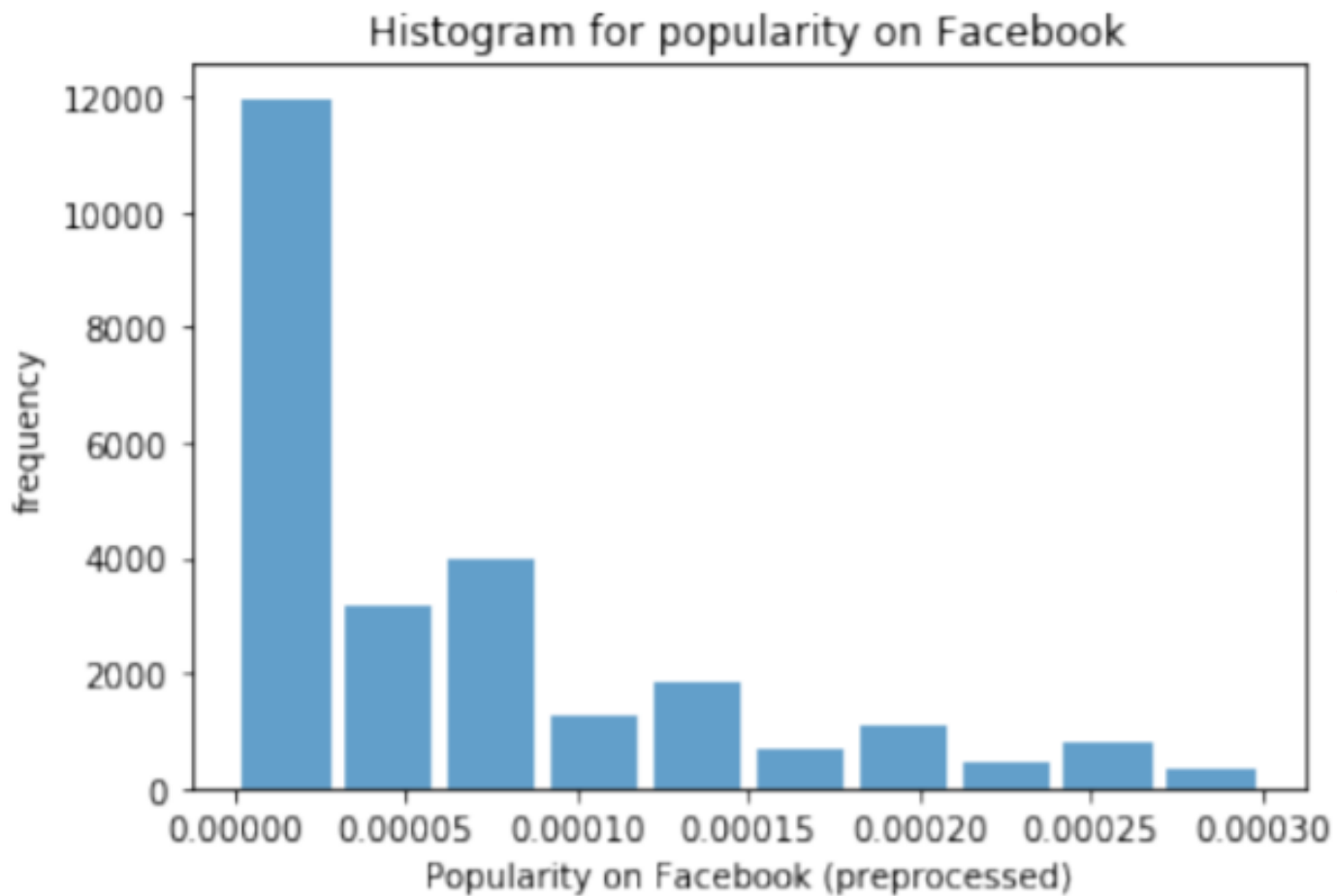




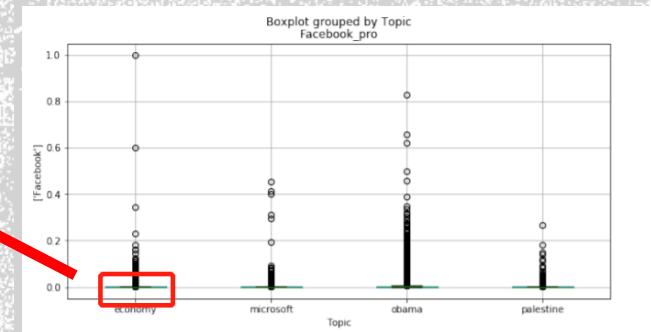
# Exploratory Data Analysis







# Exploratory Data Analysis





# THE END

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