

**Data Analysis report:**

# **ECOMMERCE ONLINE PLATFORM AND WEBSITE ANALYSIS**

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# 01. Introduction



**Goal of the Report**



**Methodology**

## **Topic**

Ecommerce Online Platform and Website Analysis

## **Goal of the Report**

- retrieve important factors in platform and websites affecting sales
- provide possible methods to increase users and transactions

# Methodology

Tools: tidyverse, gcookbook, shiny

1

platform data

|

marketing budget

2

sns data

|

sns platform

3

website data

|

page type,  
events/promotions

4

keyword data

|

search relevance

data:

|

cleaned date:

## 02. Data Analysis



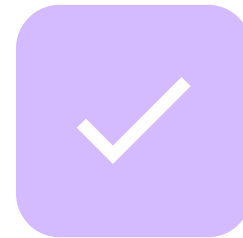
**Platform Advertisement Budget and Sales**



**Social Media Platform Usage Per Year**



**Website Page Type Frequency, Duration,  
and Others**



**Category Keyword Search Relevance**

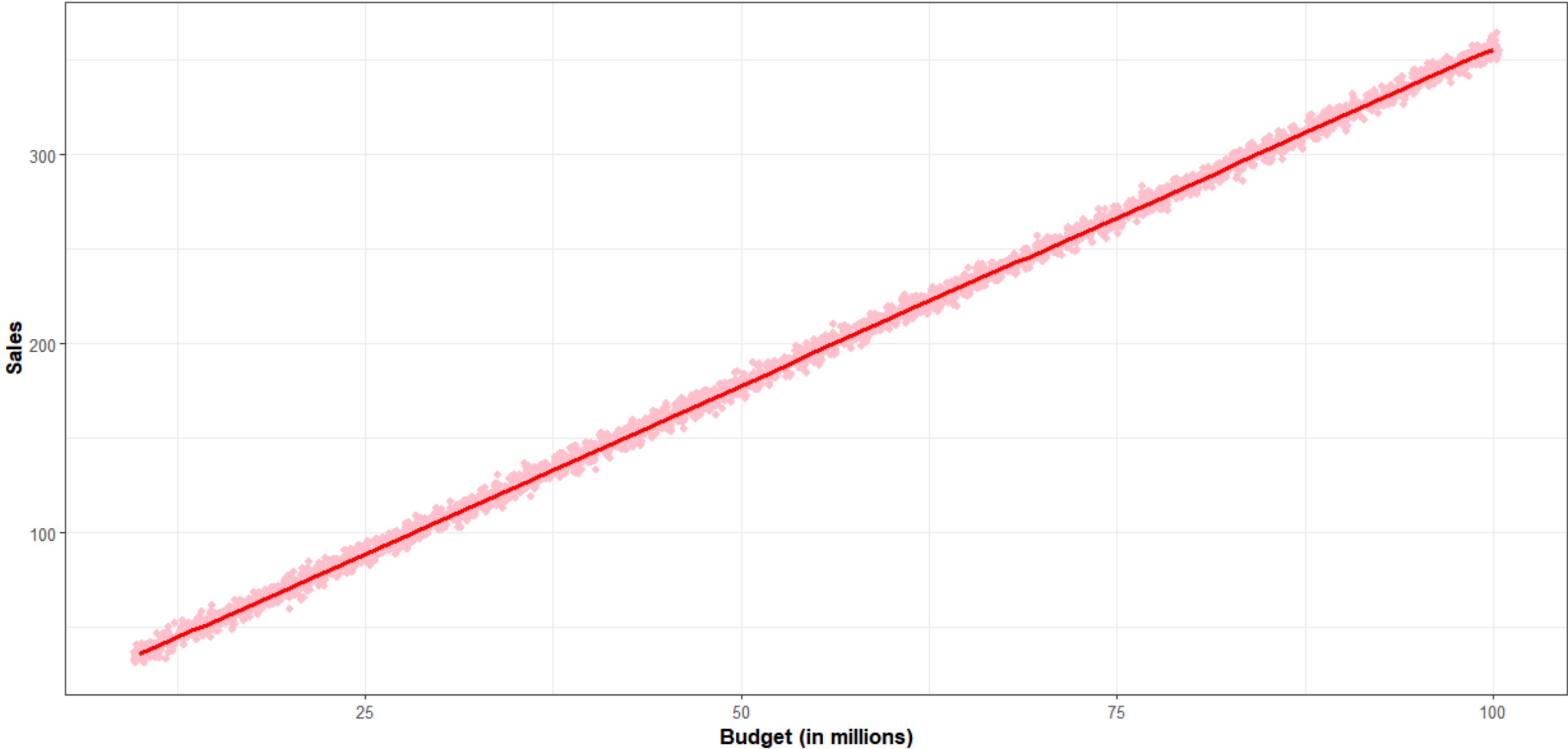
# Platform Advertisement Budget and Sales

Select platform type:

TV

There are three platforms: TV, Radio, and Social Media.

The plot functional relationship between the budget invested of the selected platform and sales (revenue) via the scatterplot and smooth curve.



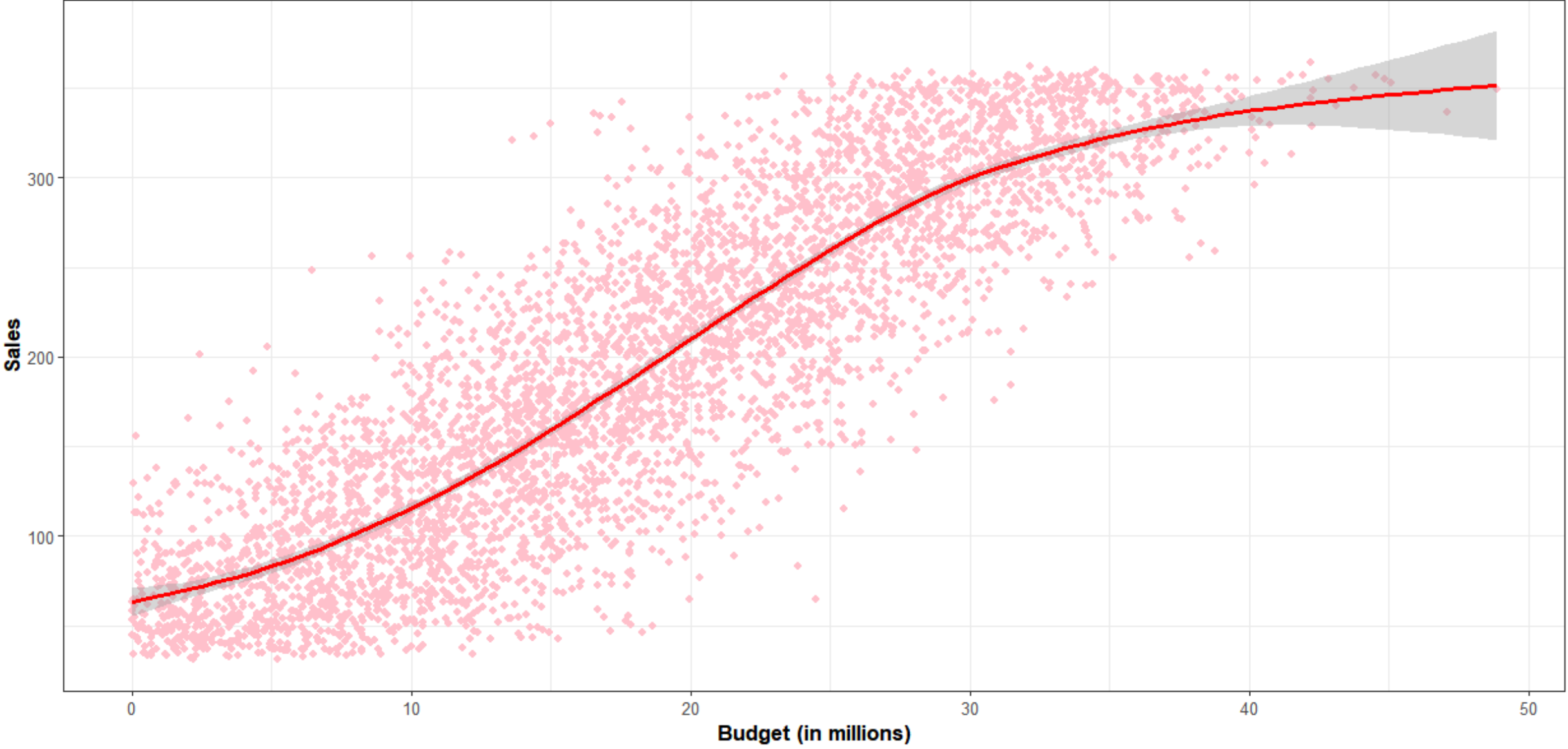
# Platform Advertisement Budget and Sales

Select platform type:

Radio

There are three platforms: TV, Radio, and Social Media.

The plot functional relationship between the budget invested of the selected platform and sales (revenue) via the scatterplot and smooth curve.





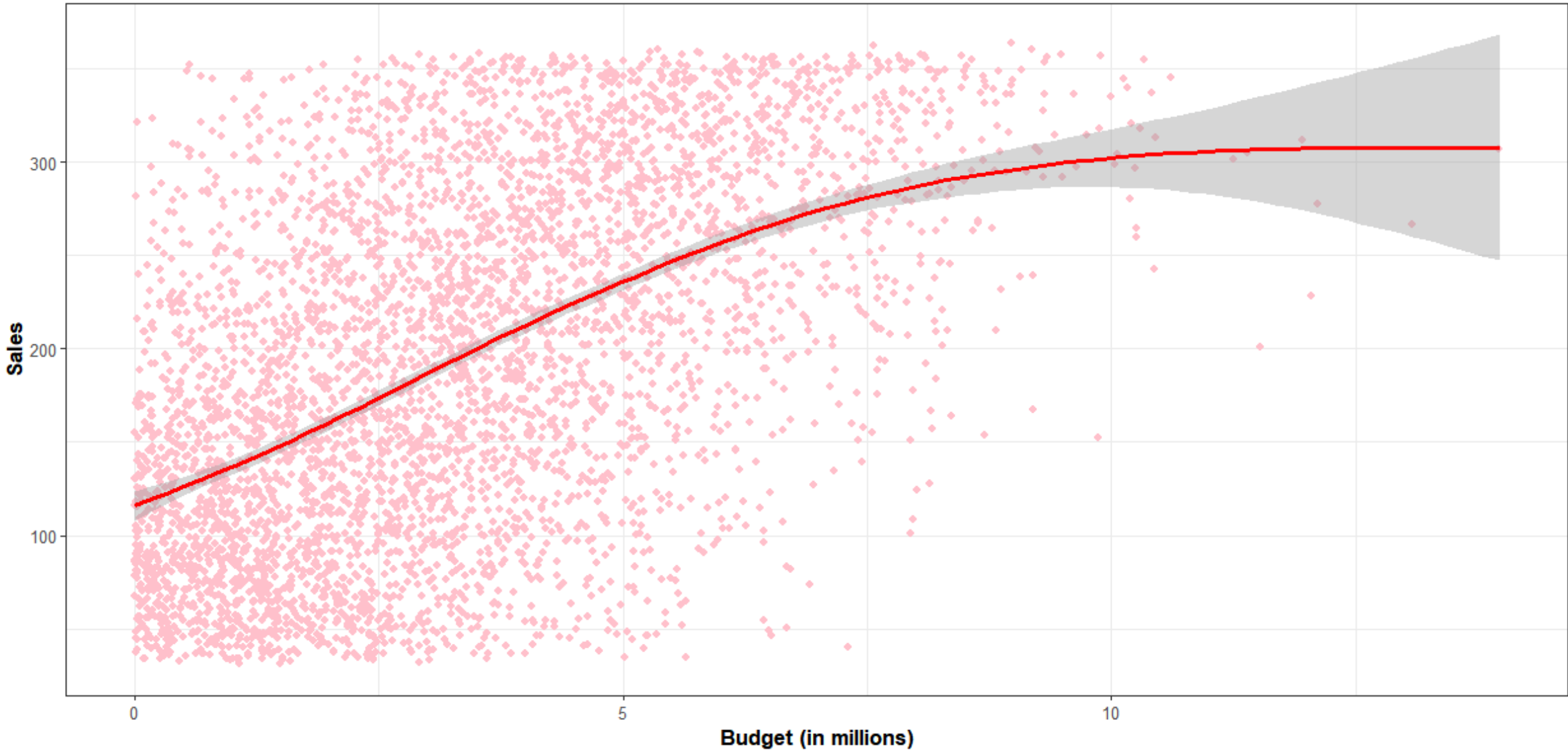
# Platform Advertisement Budget and Sales

Select platform type:

Social\_Media

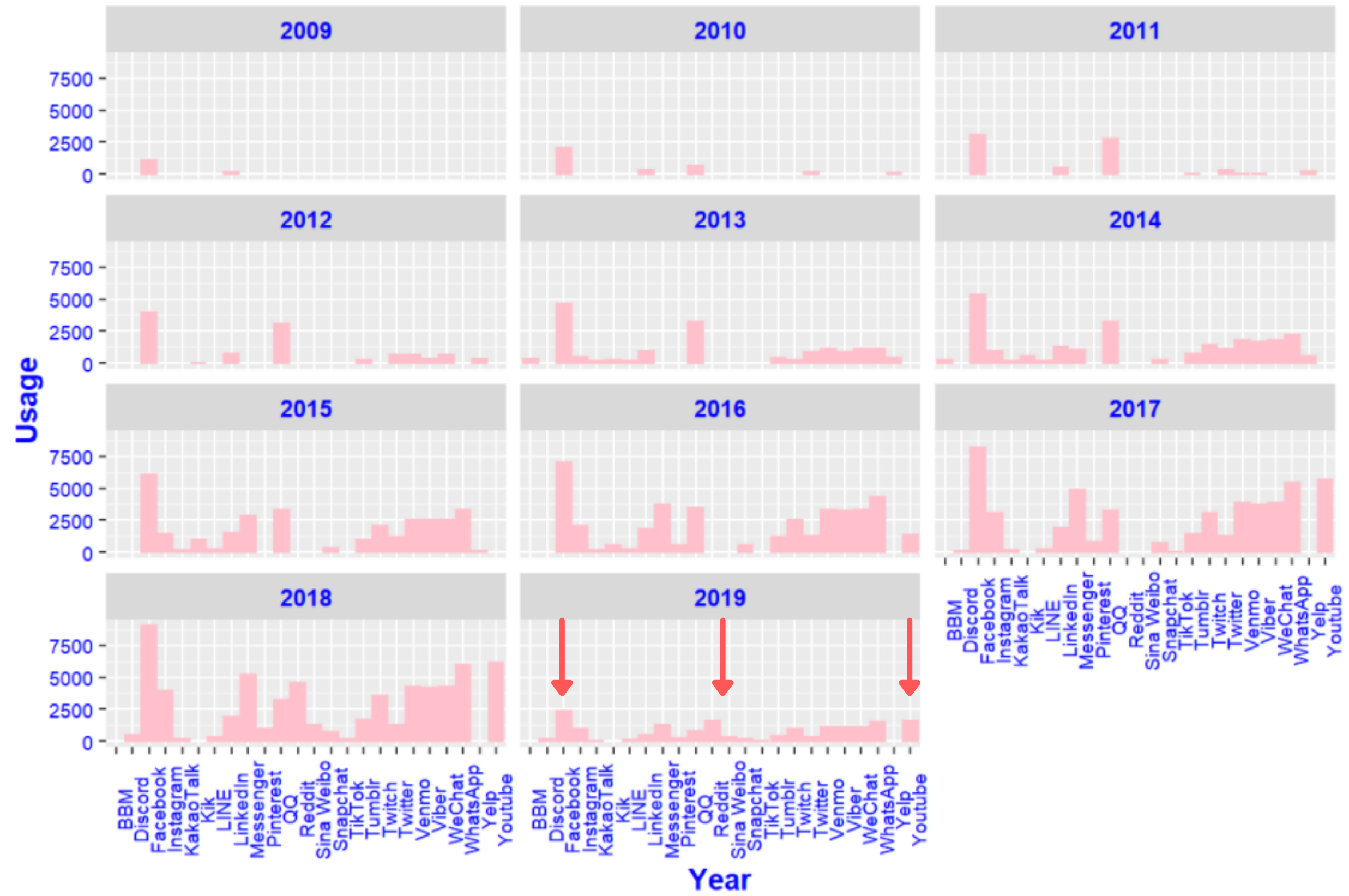
There are three platforms: TV, Radio, and Social Media.

The plot functional relationship between the budget invested of the selected platform and sales (revenue) via the scatterplot and smooth curve.





# Most Used Social Media Platform Per Year



# Website Page Type Statistics

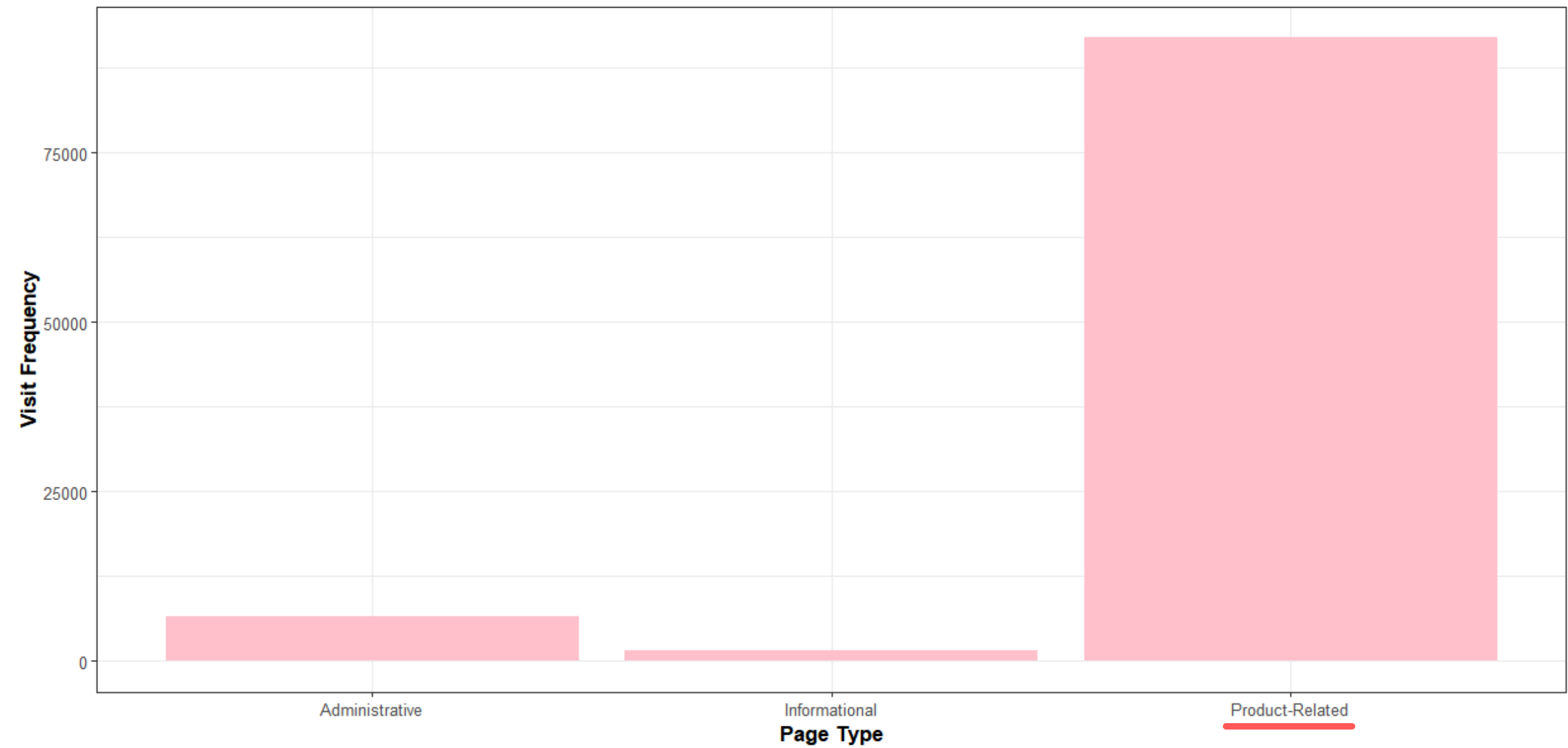
Choose y-axis:

count

There are two y variables to choose from.

count : shows the visit frequency of each page type,

duration : shows the visit duration on each page type.



# Website Page Type Statistics

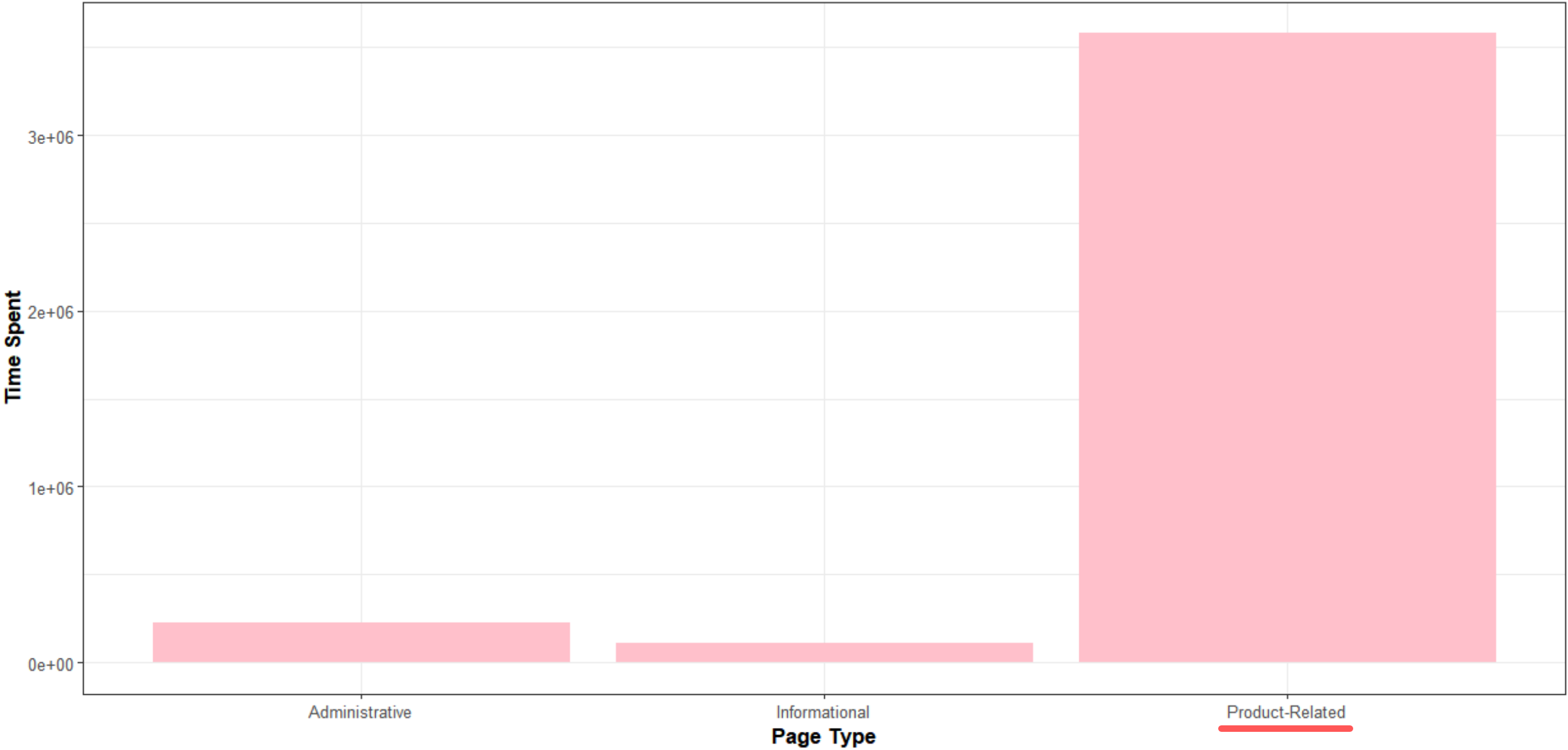
Choose y-axis:

duration

There are two y variables to choose from.

count : shows the visit frequency of each page type,

duration : shows the visit duration on each page type.



# Holiday and Weekend Effect on Revenue

Select factor effect:

holiday

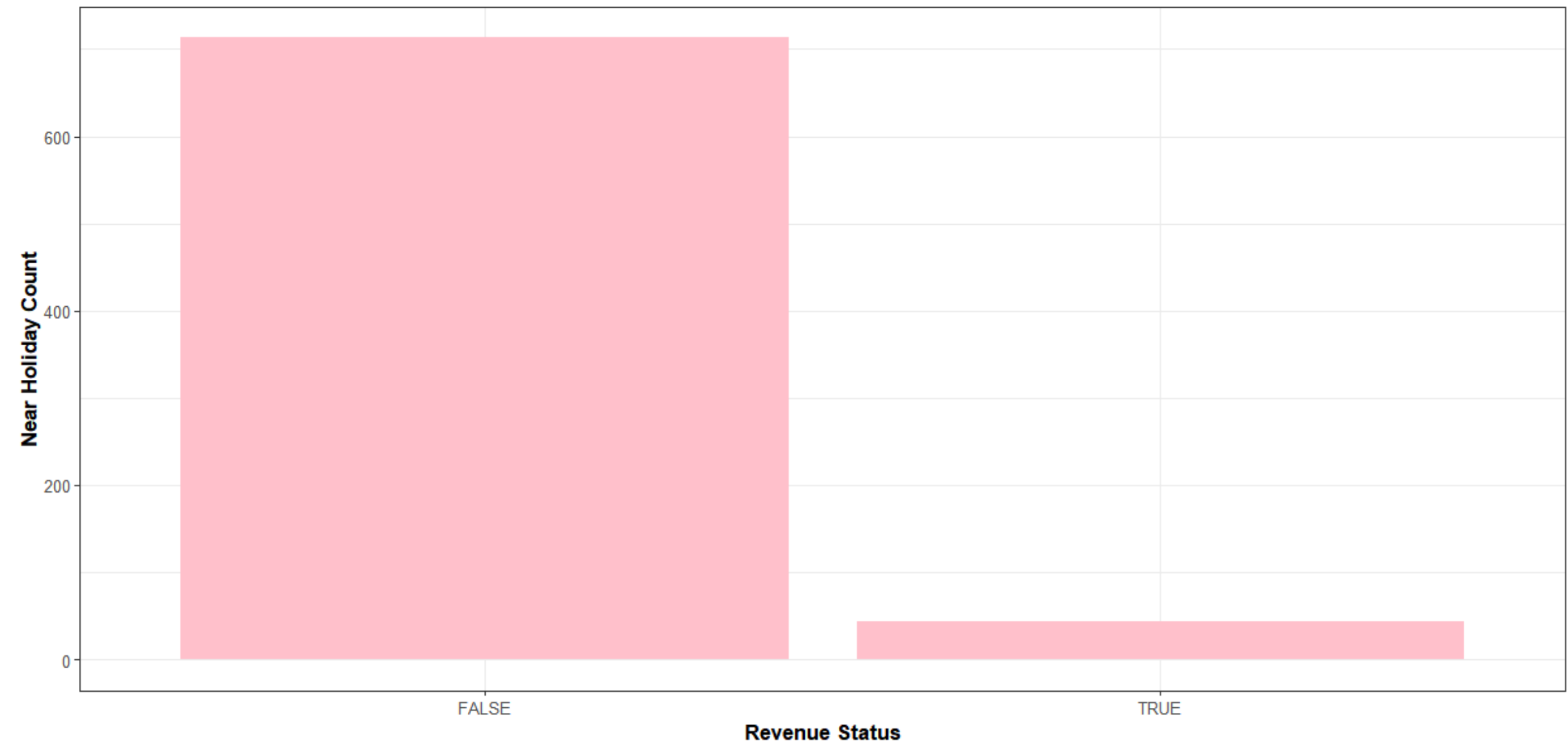
▼

This plot shows whether a special day or event has an effect on revenue.

There are two variables: holiday and weekend.

holiday : shows the count of near holidays at the point of transaction,

weekend : shows the count of weekends at the point of transaction.



# Holiday and Weekend Effect on Revenue

Select factor effect:

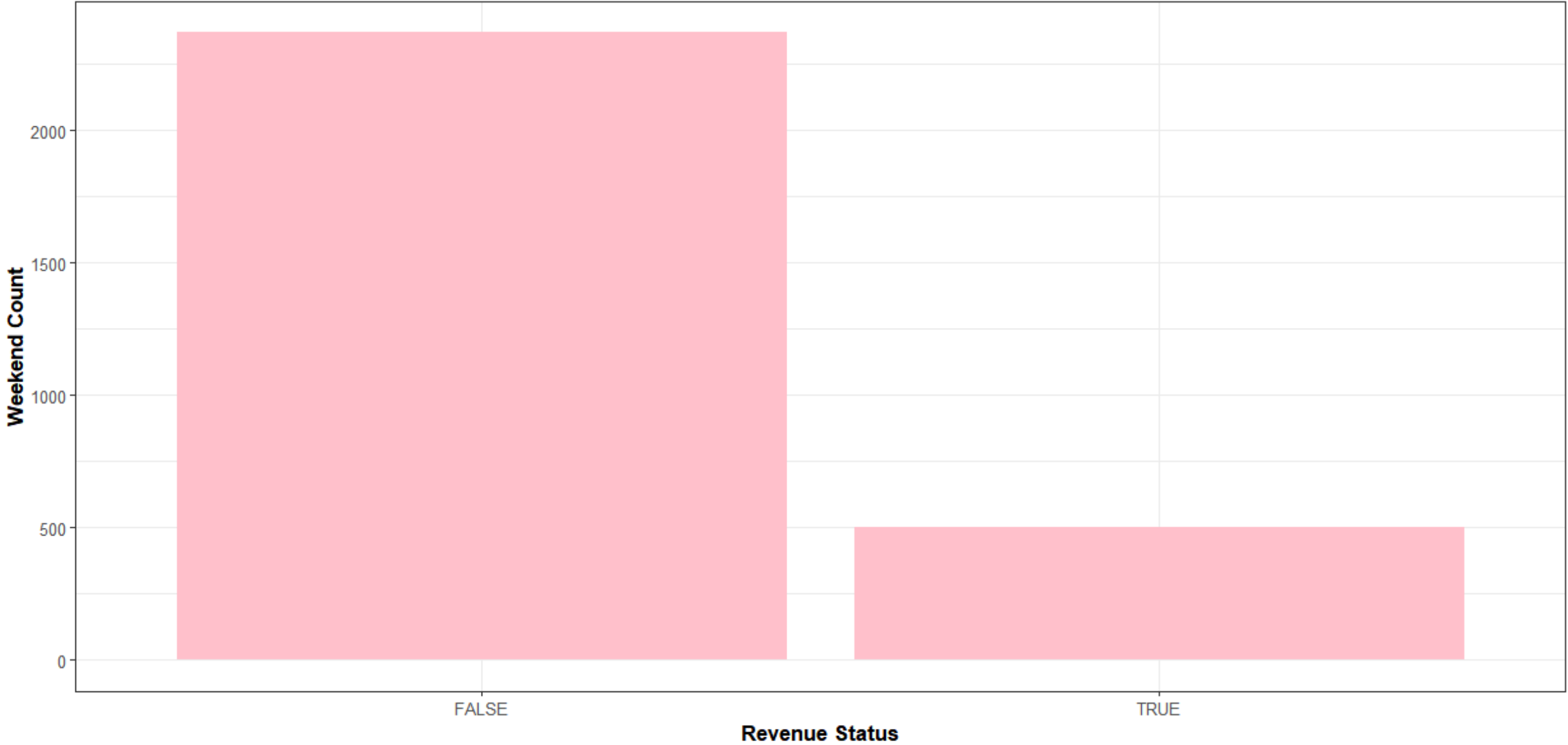
weekend

This plot shows whether a special day or event has an effect on revenue.

There are two variables: holiday and weekend.

holiday : shows the count of near holidays at the point of transaction,

weekend : shows the count of weekends at the point of transaction.



# Category Keyword Search Relevance

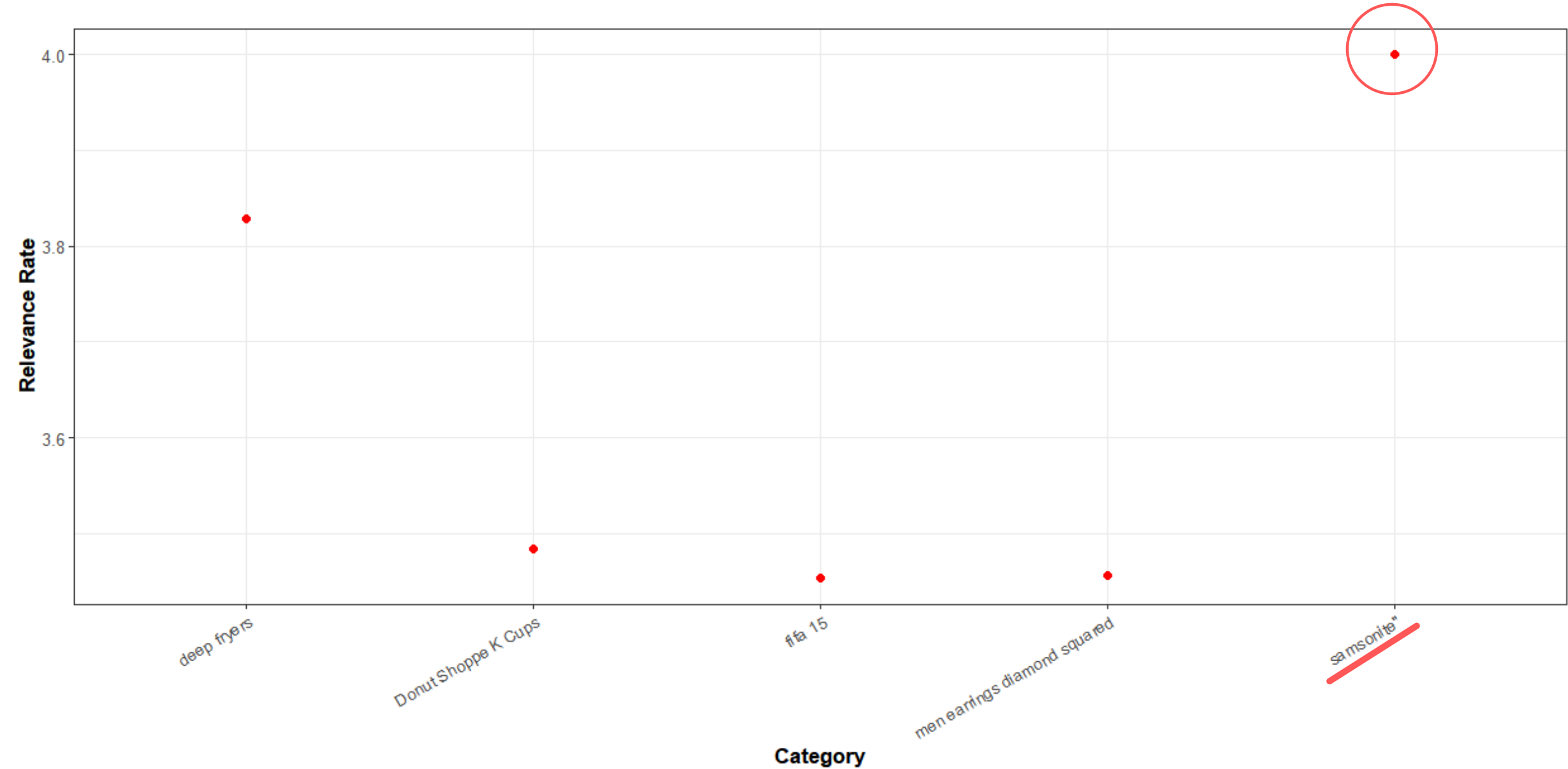
View group of

highest relevance rate

There are two groups to choose from: (1) 5 categories with highest relevance rate, (2) 5 categories with lowest relevance rate

highest relevance rate : stands for (1),

lowest relevance rate : stands for (2),





# Category Keyword Search Relevance

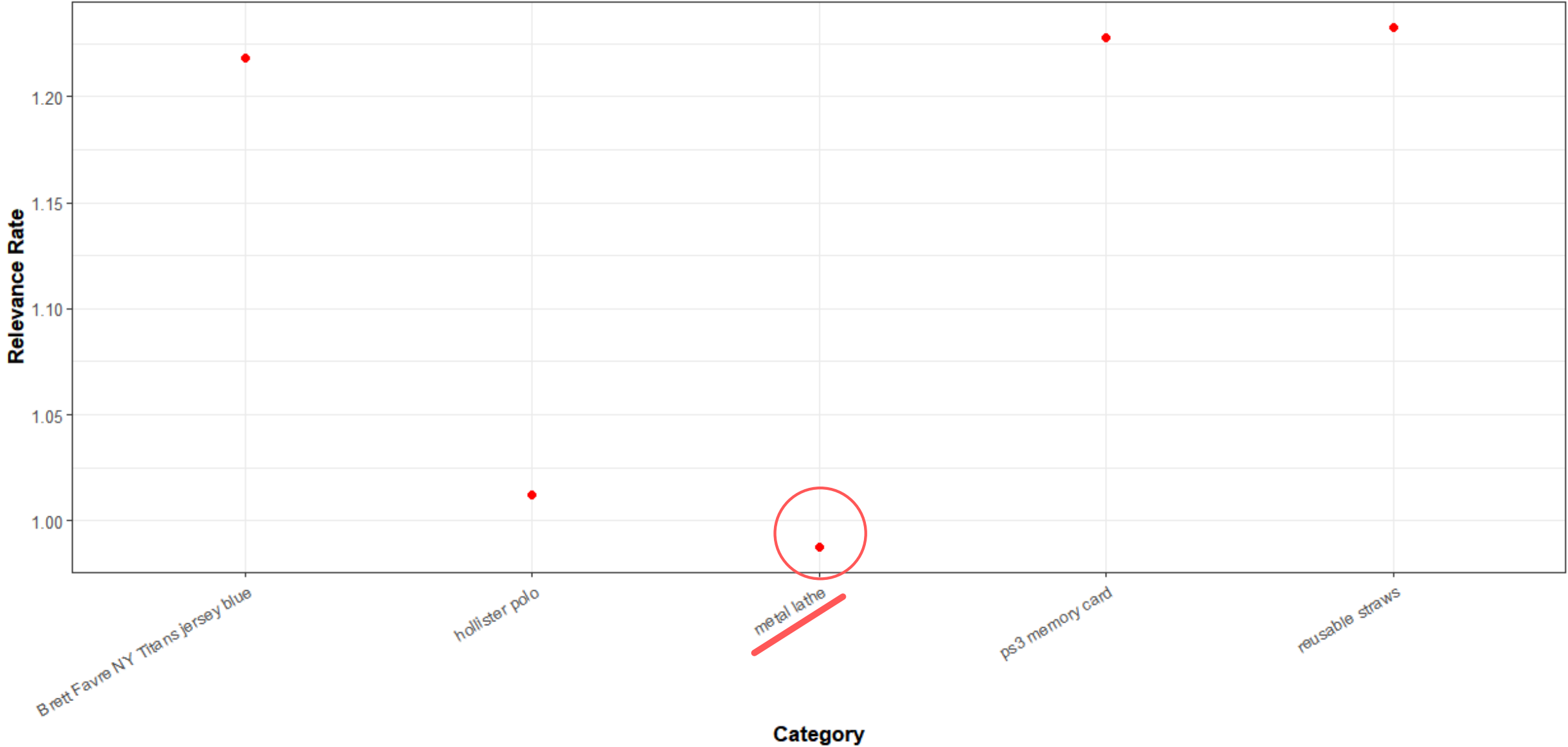
View group of

lowest relevance rate

There are two groups to choose from: (1) 5 categories with highest relevance rate, (2) 5 categories with lowest relevance rate

highest relevance rate : stands for (1),

lowest relevance rate : stands for (2),



## **03. Conclusion and Recommendation**

# Conclusion and Recommendation

01

- **TV: 80 million**
- **Radio: 30 million**
- **Social Media: 10 million**

02

- **Facebook**
- **Youtube**
- **Reddit**

03

- **Product-related pages improvement**
- **Keyword supplement**

# References

## Datasets:

- Dummy Marketing and Sales Data (<https://www.kaggle.com/harrimansaragih/dummy-advertising-and-sales-data?select=Dummy+Data+HSS.csv>) -> platform
- Most Used Social Media Platforms (<https://www.kaggle.com/mathurinache/mostusedsocialmediaplatforms>) -> sns
- Online Shoppers Purchasing Intention (<https://archive.ics.uci.edu/ml/datasets/Online+Shoppers+Purchasing+Intention+Dataset#>) -> website
- Ecommerce search relevance (<https://data.world/crowdfower/ecommerce-search-relevance>) -> keyword

## Sites:

- Shopify Business Encyclopedia ([https://www.shopify.com/encyclopedia/what-is-ecommerce#:~:text=Ecommerce%2C%20also%20known%20as%20electronic,data%20to%20execute%20these%20transactions](https://www.shopify.com/encyclopedia/what-is-ecommerce#:~:text=Ecommerce%2C%20also%20known%20as%20electronic,data%20to%20execute%20these%20transactions)))
- Ecommerce boom fuels record online competition (<https://www.shopify.com/enterprise/the-future-of-ecommerce/omnichannel>)