



# Predict Conversion in Digital Marketing Dataset

Presentation

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# Overview

This dataset provides a comprehensive look at various factors that can influence conversion rates in digital marketing campaigns. By analyzing demographic information, marketing tactics, customer engagement, and historical data, we can uncover insights to optimize our strategies and drive better results.

## 1 Comprehensive Dataset

The dataset consist of Customer ID, Age, Gender, Income, Campaign Channel, Campaign Type, Ad Spend, Click Through Rate, Conversion Rate, Website Visits, Pages Per-Visit, Time On-Site, Social Shares, Email Opens, Email Clicks, Previous Purchases, Loyalty Points, Advertising Platform, Advertising Tool, Conversion.

## 2 Actionable Insights

The analysis will uncover strategies to improve conversion rates and optimize marketing efforts.



# Features

## Demographic Information

### User Characteristics

Age, gender, location, household income, and other personal details that can influence buying behavior.

### Interests and Preferences

Data on users' browsing history, search queries, and past purchases to understand their interests.

### Psychographic Factors

Insights into users' values, attitudes, and lifestyle choices that shape their decision-making.



# Customer Engagement Variables

## Website Interactions

Metrics on user visits, page views, time on site, and engagement with different content.

## Social Media Interactions

Shares, likes, comments, and other social engagement signals across platforms.

1

2

3

## Email Engagement

Open rates, click-through rates, and subscriber activity for email marketing campaigns.

# Historical Data

1

## Past Campaigns

Record of previous digital marketing efforts, including their objectives, strategies, and outcomes.

2

## Conversion Trends

Historical data on conversion rates, sales, and revenue generated from past marketing initiatives.

3

## Market Shifts

Insights into industry changes, consumer behavior, and other external factors that may have influenced past performance.



# Target Variable



## Conversion Rate

The primary metric we aim to predict, indicating the percentage of visitors who take a desired action, such as making a purchase or signing up for a service.



## Revenue Impact

Accurately predicting conversion rates can have a significant impact on revenue generation and profitability for digital marketing campaigns.



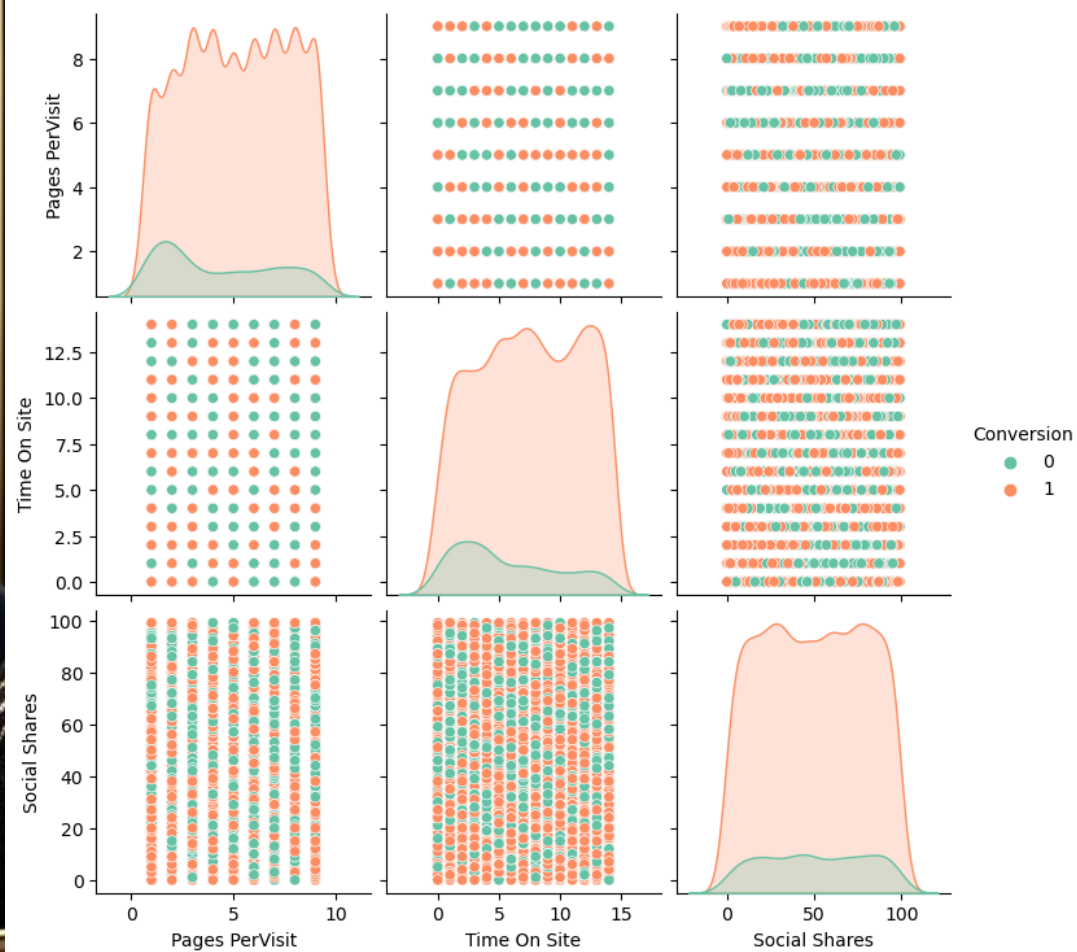
## Optimization Potential

The model's predictions can guide strategic decisions and optimize marketing efforts to improve overall performance.

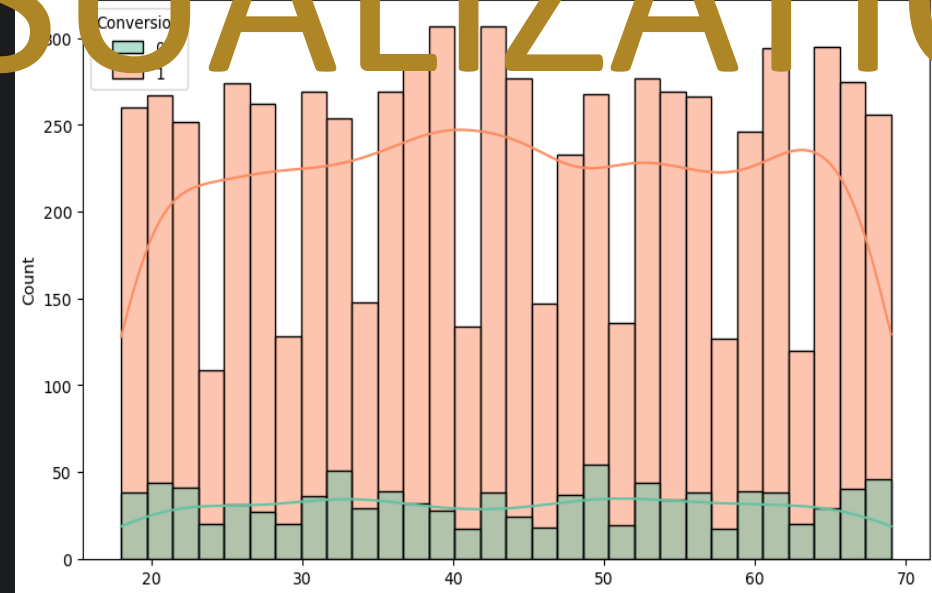


# DATA VISUALIZATION

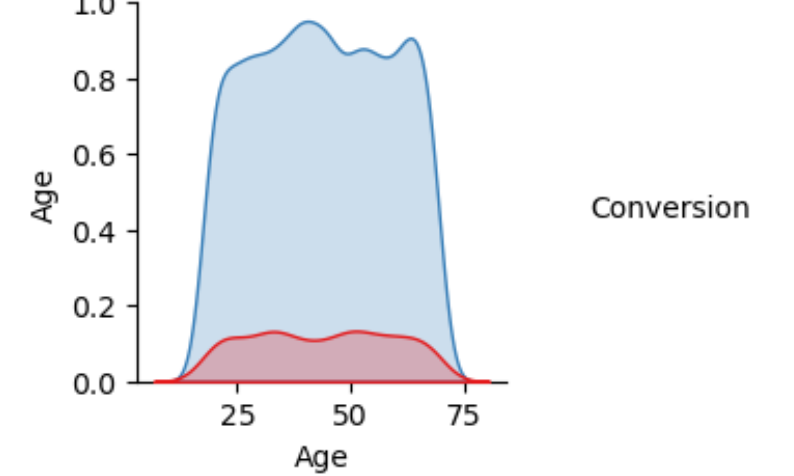
Pairplot of Key Variables by Conversion



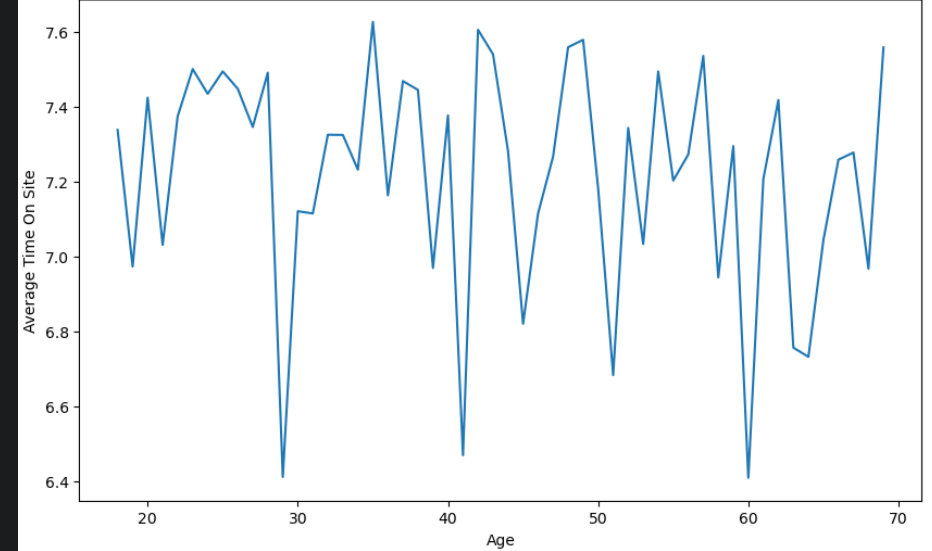
Age Distribution by Conversion



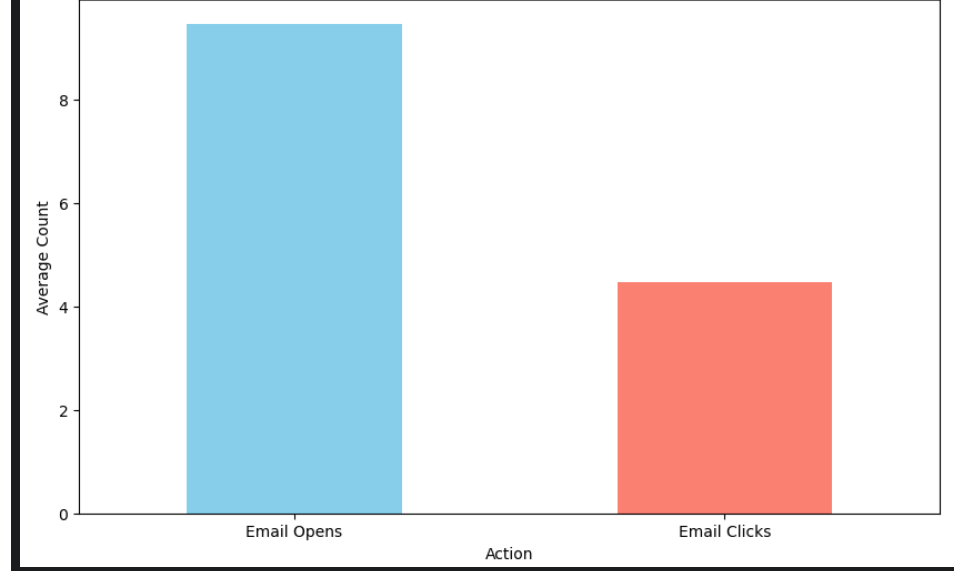
Pairplot of Numerical Variables by Conversion

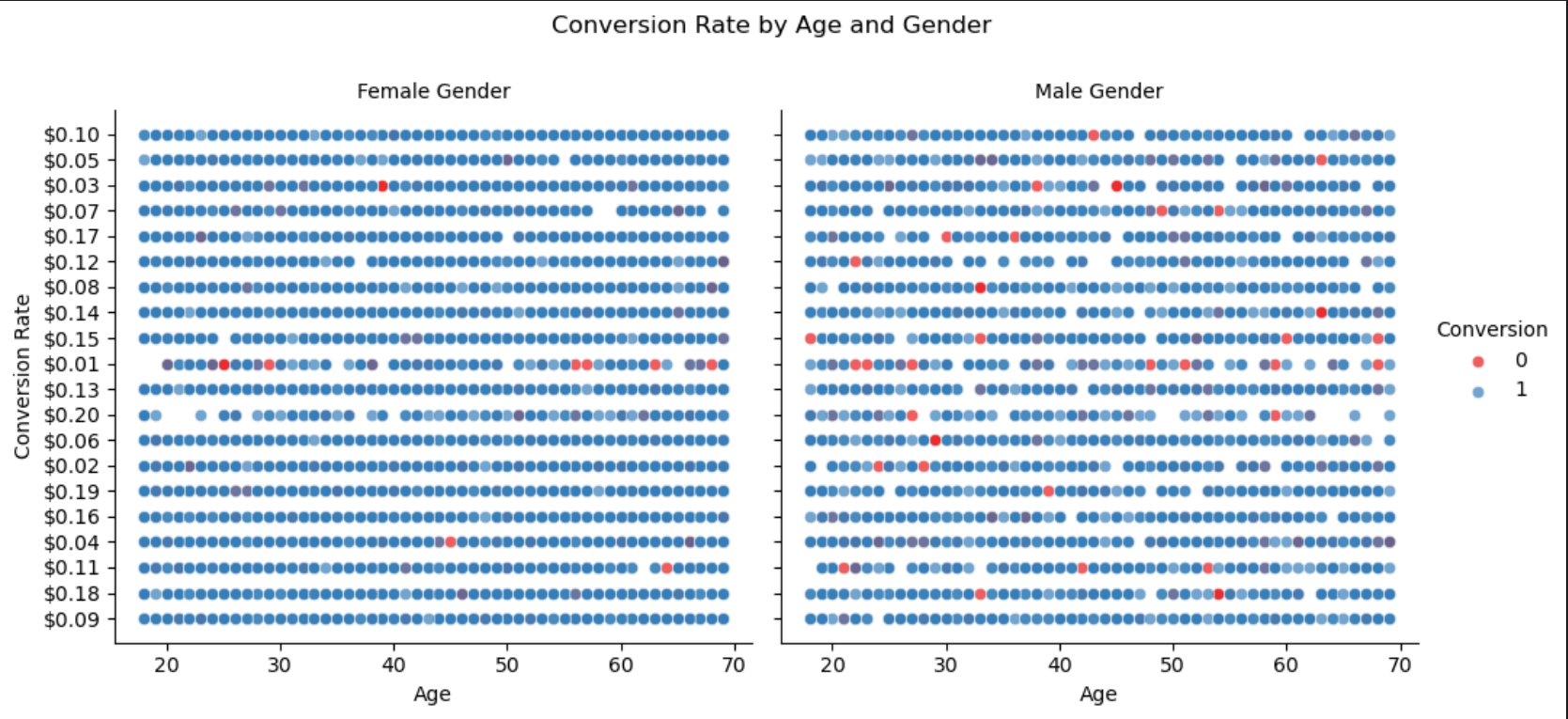
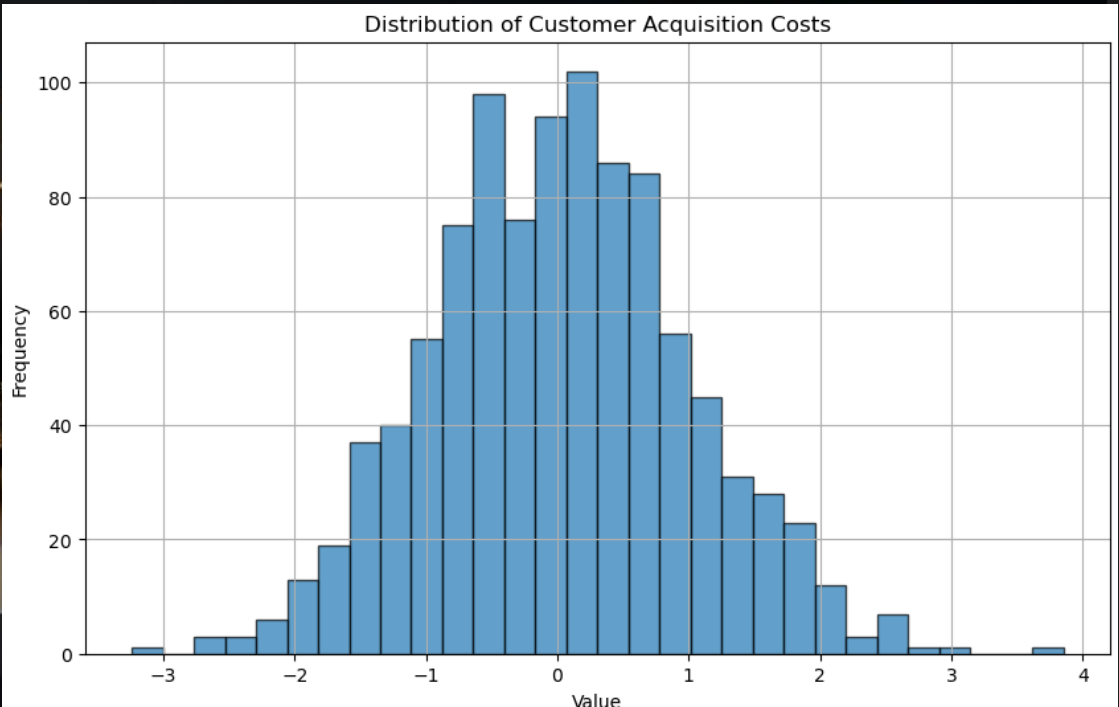
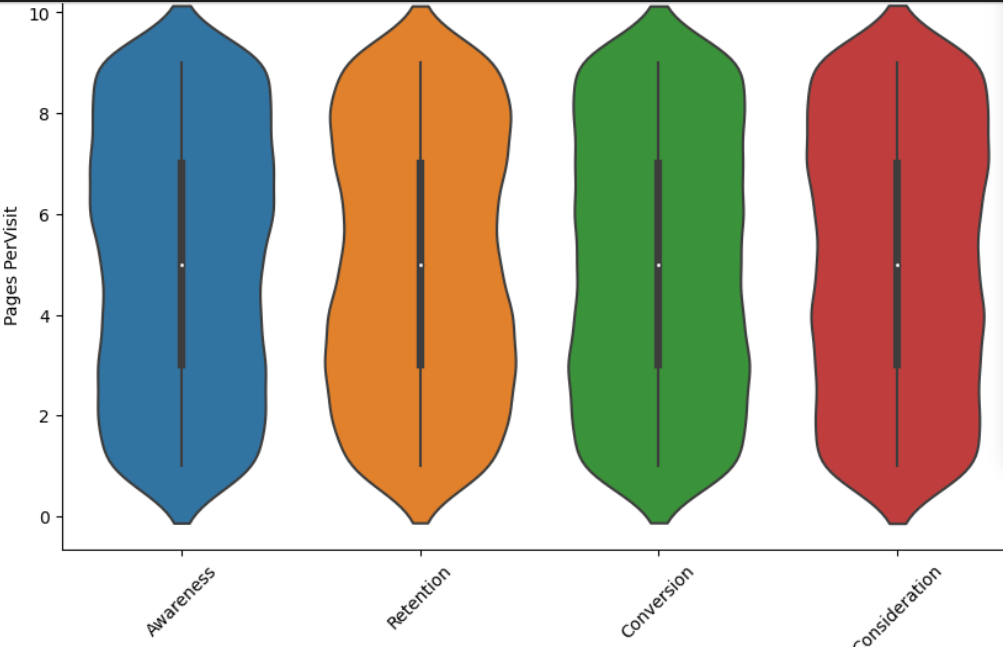
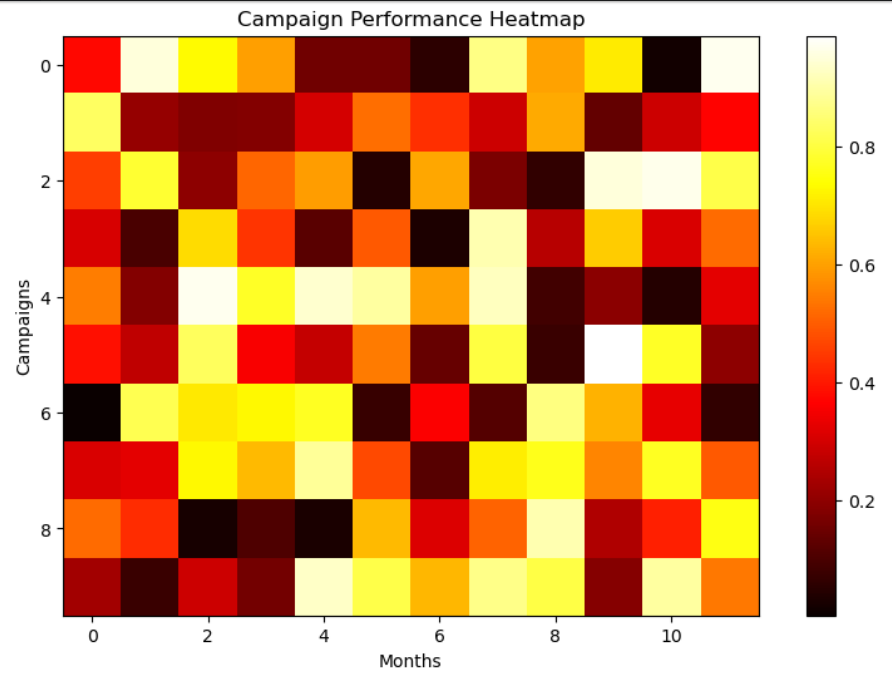
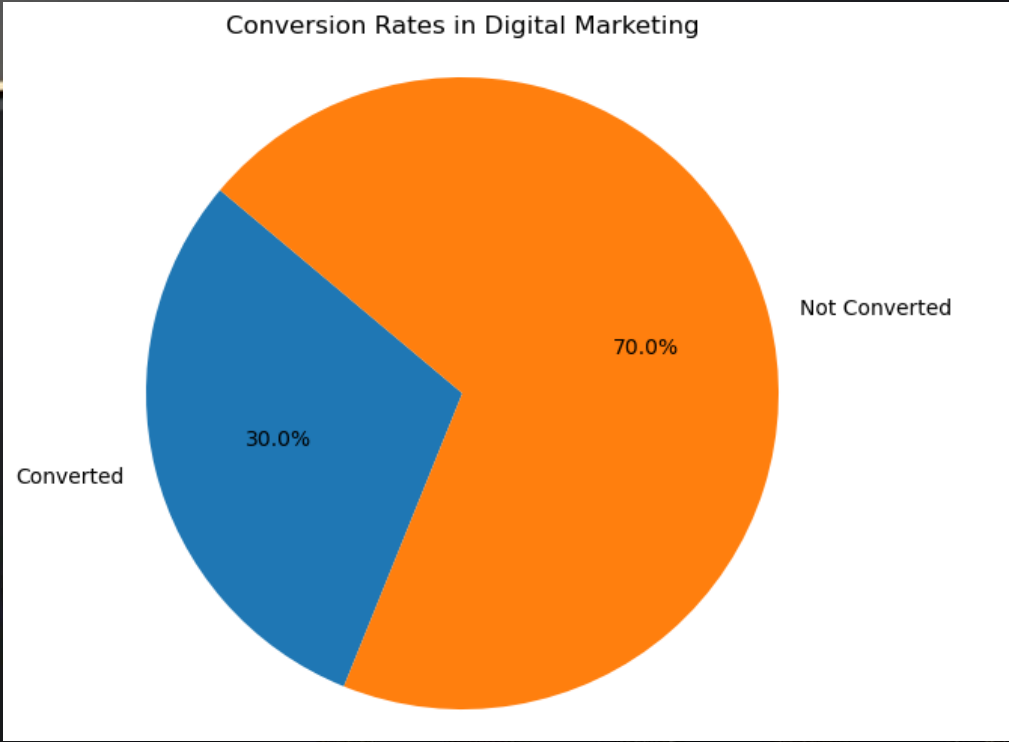


Average Time On Site by Age



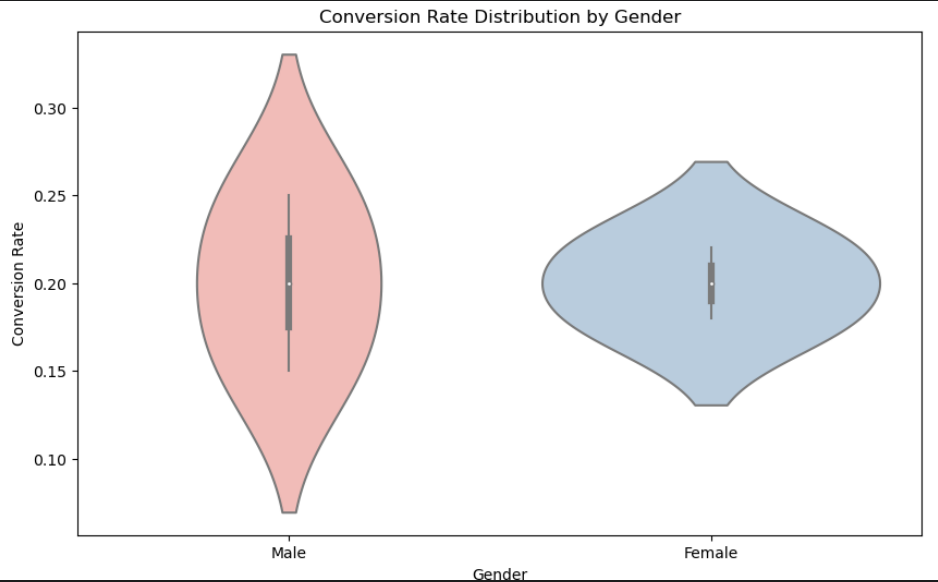
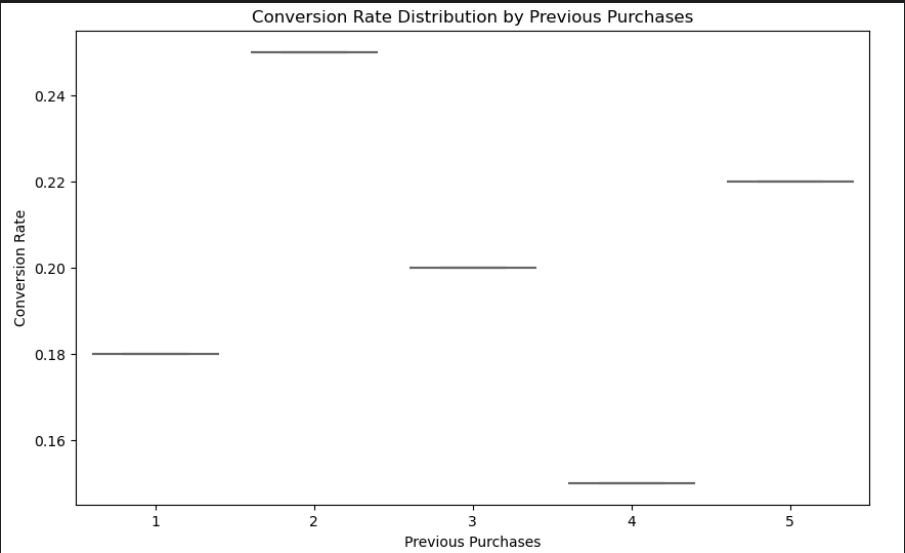
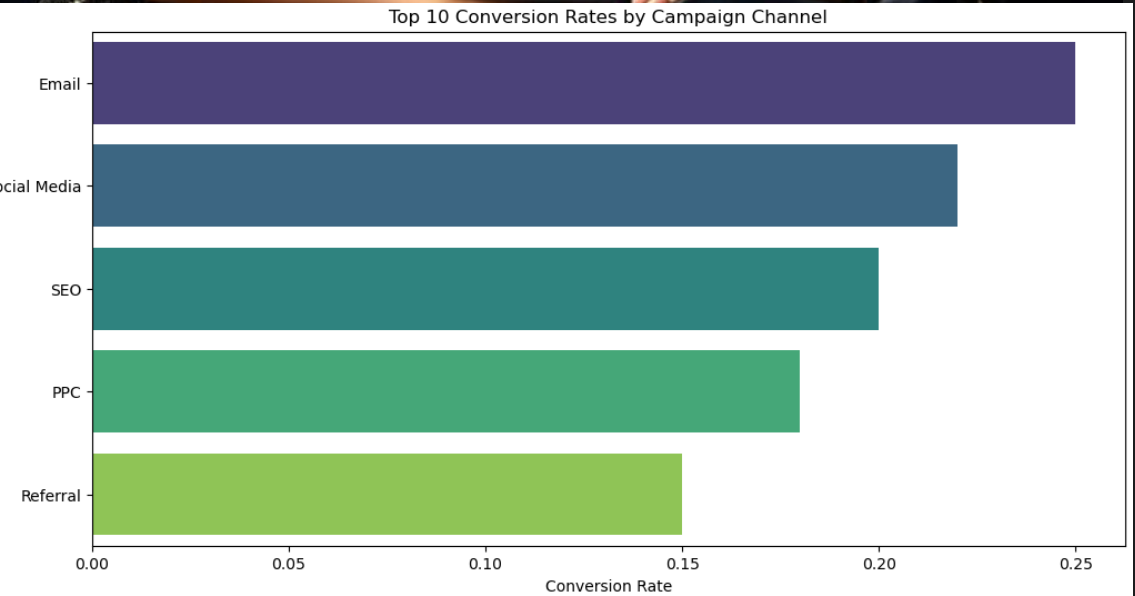
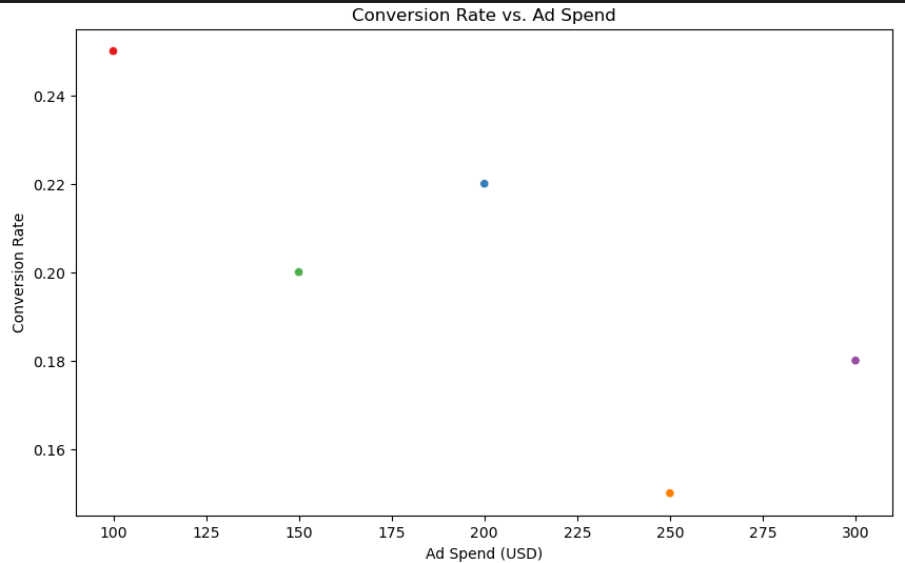
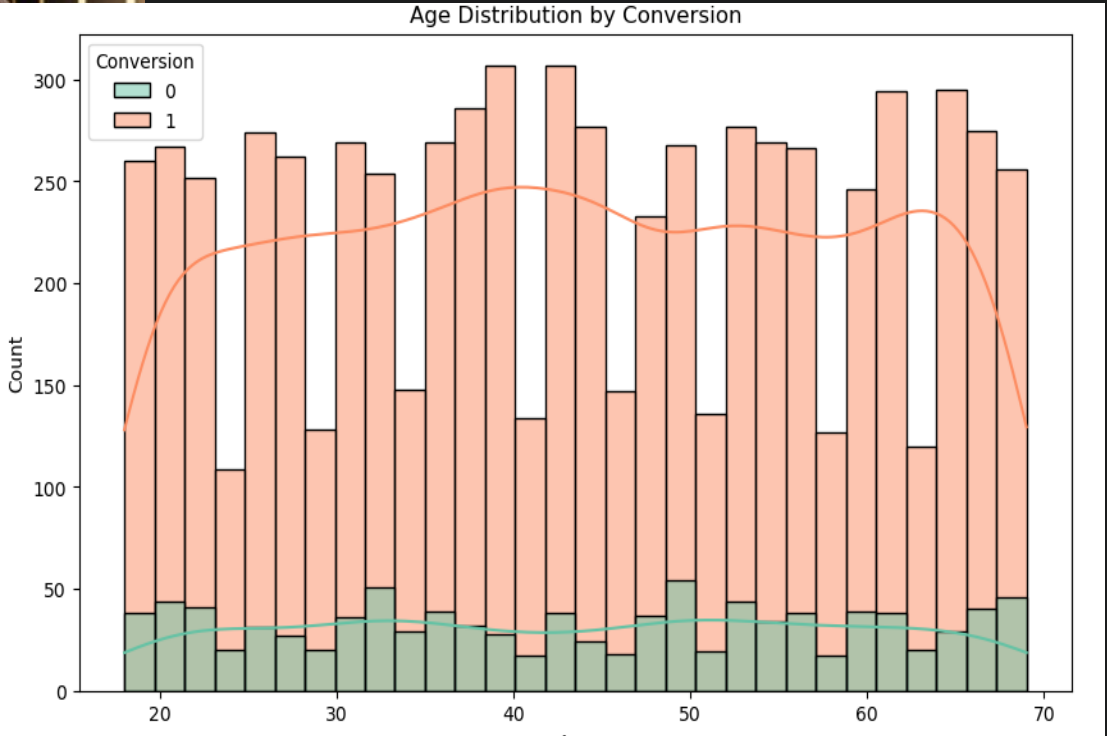
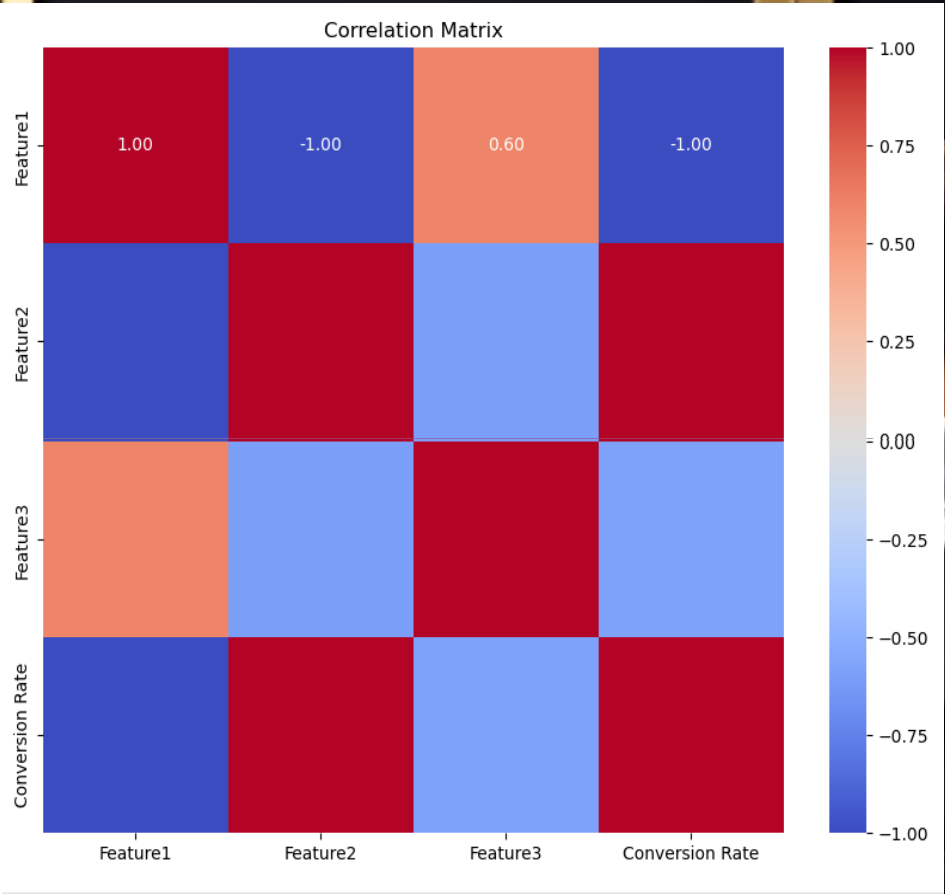
Average Email Opens vs Clicks



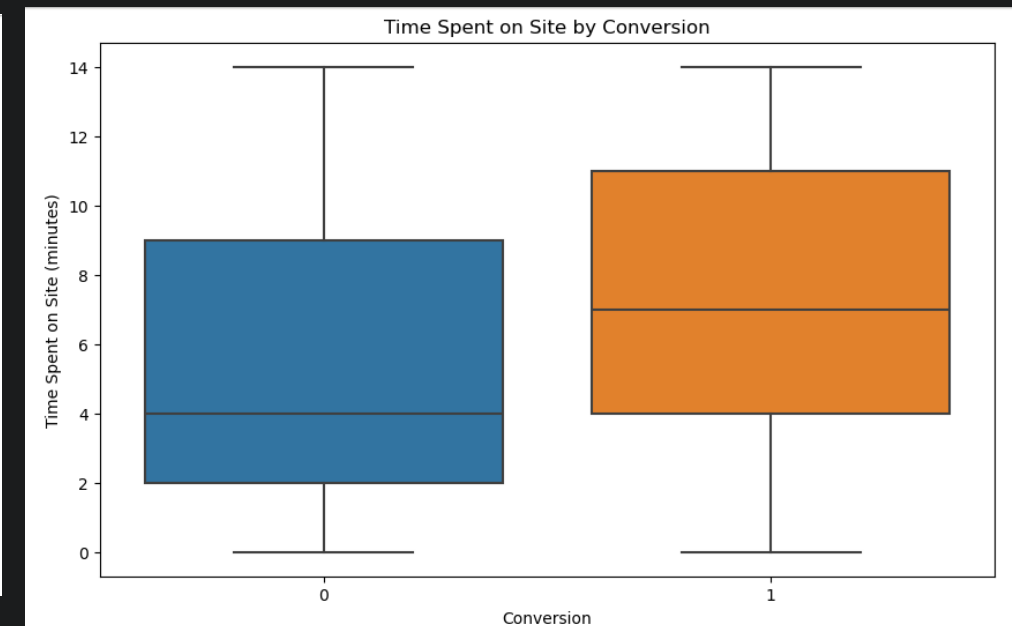
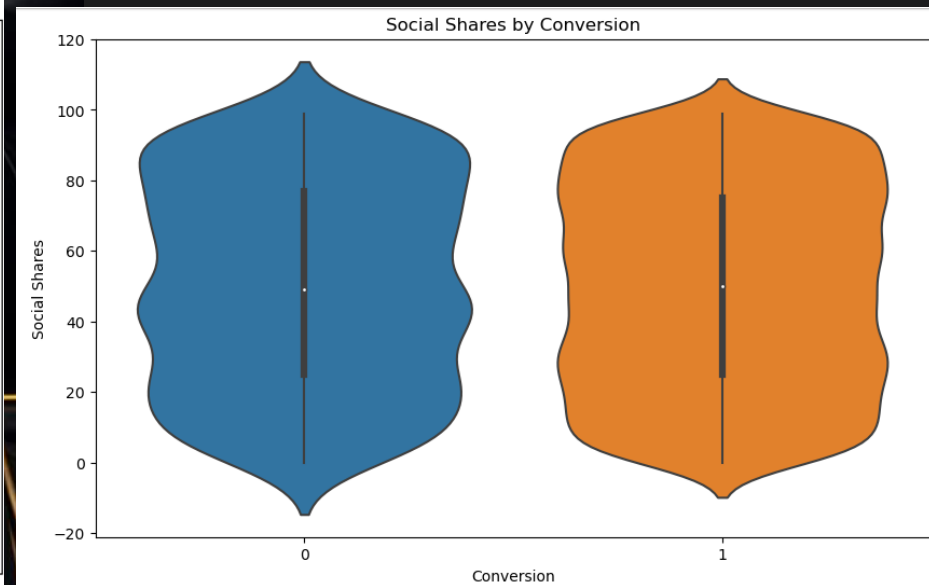
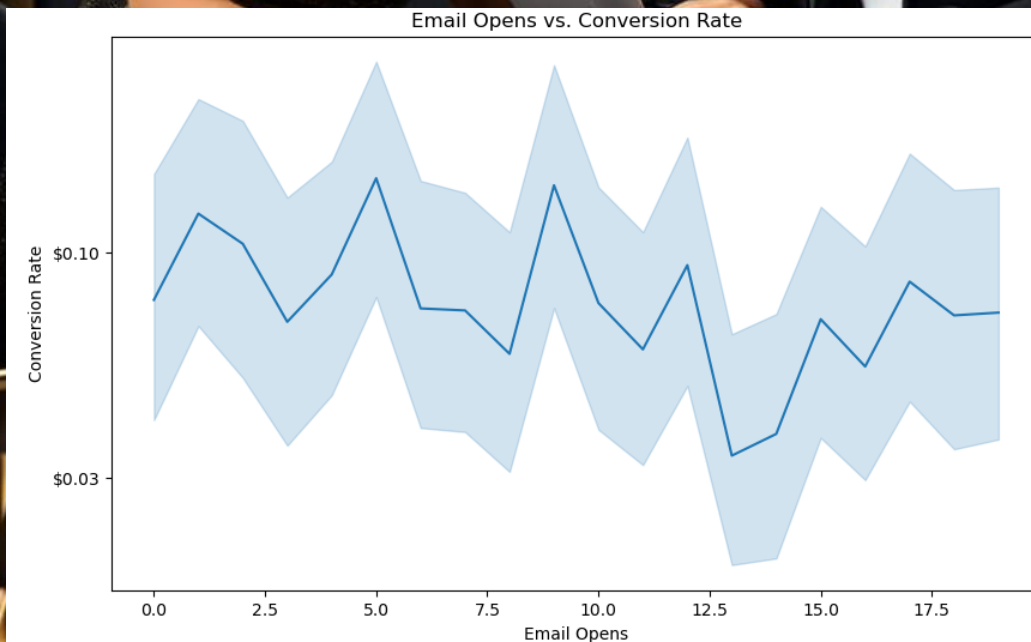
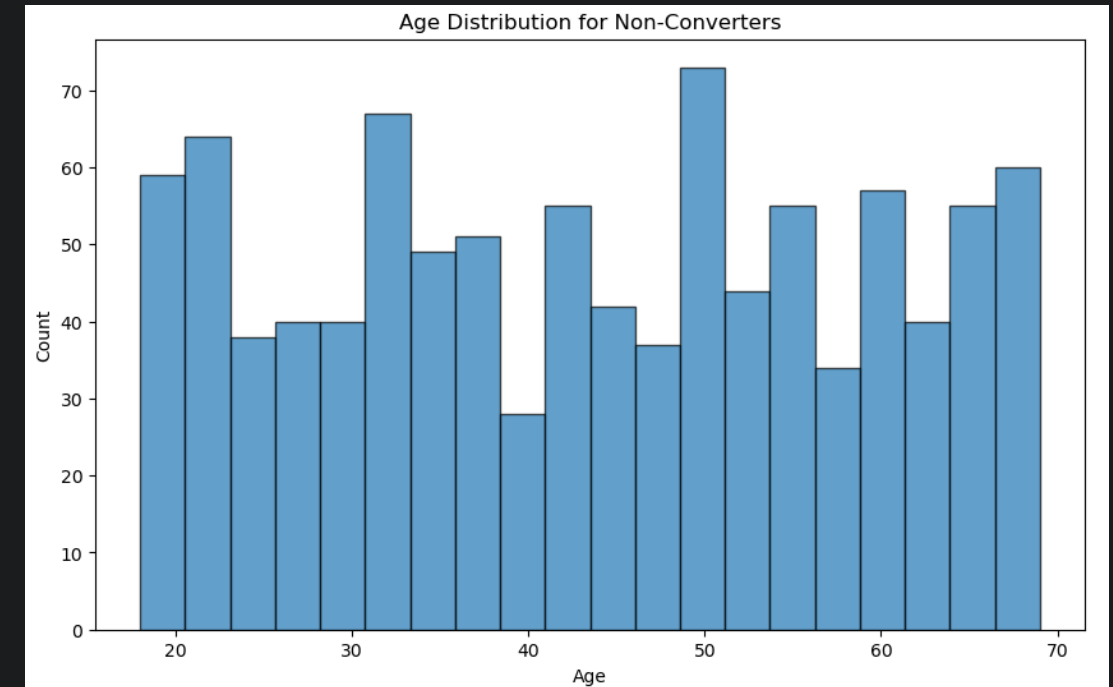
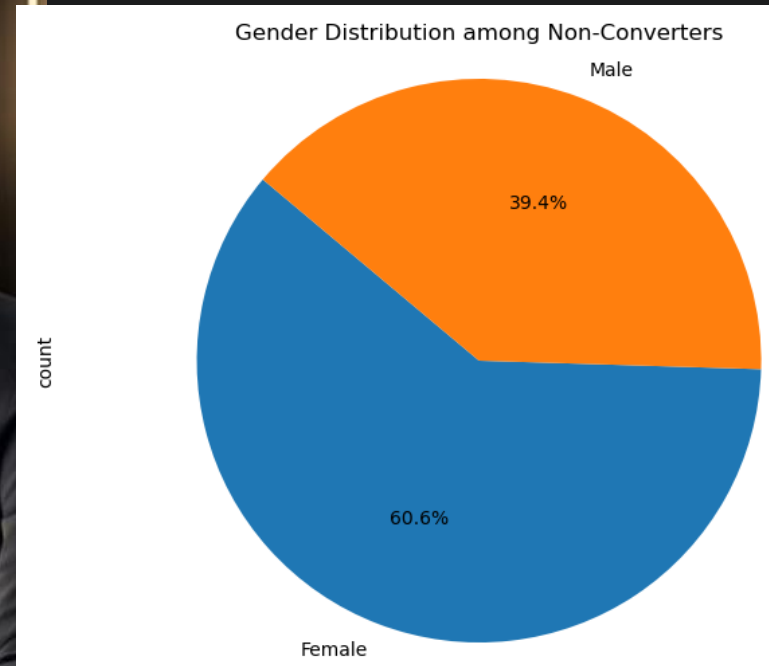
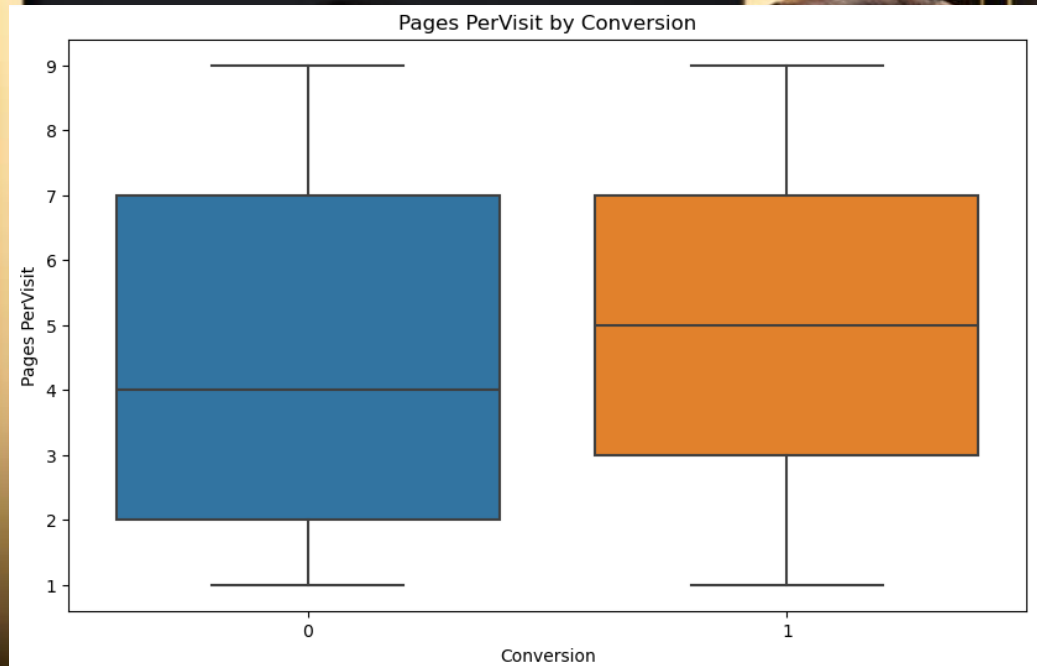




# Top 6 Conversion Rate



# Least 6 Conversion Rate





# Potential Applications

## Campaign Planning

Use predicted conversion rates to allocate budgets, set targets, and strategize marketing initiatives.

## Audience Targeting

Identify the most promising customer segments and tailor campaigns to their preferences.

## Optimization

Continuously refine marketing tactics and channels based on predicted conversion performance.

## Forecasting

Generate accurate revenue projections and financial planning based on predicted conversion rates.





THANK YOU.