

Social Media Campaign Performance Tracker

Future Interns – Data Science & Analytics Internship

Task 2

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Track Code: DS

Tool Used: Power BI

Introduction

Social media advertising has become one of the most effective ways for businesses to reach their target audience and increase revenue. Platforms such as Facebook and Instagram provide detailed performance data that can be analyzed to understand how well marketing campaigns are performing.

This project focuses on analyzing social media campaign data to evaluate key performance metrics such as Click Through Rate (CTR), Return on Investment (ROI), clicks, conversions, ad spend, and revenue. The analysis was performed using Power BI to create an interactive and visually appealing dashboard that helps in understanding campaign effectiveness and supports data-driven decision-making.

Objectives of the Project

The main objectives of this project are:

- To analyze the performance of different social media ad campaigns
 - To compare Facebook and Instagram in terms of engagement and returns
 - To evaluate CTR and ROI for each campaign
 - To identify high-performing and underperforming campaigns
 - To provide insights and recommendations for campaign optimization
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Dataset Overview

The dataset used in this project contains advertising performance data from Facebook and Instagram campaigns. Each record represents a marketing campaign along with its associated performance metrics. The dataset includes information such as campaign name, platform, ad spend, revenue generated, number of clicks, impressions, conversions, CTR, and ROI.

This data helps in understanding how marketing budgets are being utilized and how effectively campaigns are converting user engagement into revenue.

Tools and Methodology

Power BI was used as the primary tool for data analysis and visualization. The dataset was first reviewed to check for missing or inconsistent values. Necessary data cleaning and formatting were performed to ensure accuracy.

Key metrics such as CTR and ROI were calculated using Power BI measures. Relationships were created where required, and the data was transformed into meaningful visuals to enable easy interpretation of results.

Dashboard Overview

An interactive Power BI dashboard was developed to present the analysis clearly and effectively. The dashboard includes KPI cards displaying total revenue, total spend, average CTR, overall ROI, total clicks, and total conversions.

Visualizations such as bar charts, line charts, and donut charts were used to analyze campaign-wise and platform-wise performance. Filters were added to allow users to view data for specific campaigns or platforms.

(Insert dashboard screenshots here)

Key Insights

The analysis revealed that the Festive Offer campaign achieved the highest ROI, indicating strong performance and effective targeting. Instagram campaigns showed higher engagement and better CTR compared to Facebook, making it a more effective platform for user interaction.

Some campaigns, such as Clearance Sale, recorded lower CTR and ROI, suggesting the need for better ad creatives or audience targeting. The analysis also showed that higher ad spend does not always guarantee higher revenue, highlighting the importance of optimizing campaigns rather than simply increasing budget.

Recommendations

Based on the insights obtained from the dashboard, it is recommended to allocate more budget to high-performing campaigns and platforms that deliver better ROI.

Underperforming campaigns should be optimized by improving ad creatives, refining audience targeting, or adjusting campaign strategies.

Regular monitoring of CTR and ROI is essential to ensure efficient use of marketing budgets and to improve overall campaign effectiveness.

Conclusion

This project successfully analyzed social media campaign performance using Power BI. The interactive dashboard provides clear insights into campaign effectiveness, platform performance, and key marketing metrics.

Through this task, valuable skills in marketing analytics, data visualization, KPI analysis, and dashboard storytelling were developed. The project meets the requirements of Task 2 of the Future Interns Data Science & Analytics internship and demonstrates practical application of analytical concepts in a real-world business scenario.