**CSCE - 5320**

**Story Telling**

**Project Title:**

**Visualising the Social Media Sales Prediction & Ad-Campaign Analysis**

**Team Members:**

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**Chapter 1: Life**

**Who is about?**

This project relates to the businesses desiring to market their brands and boost the sales by advertising via social media platforms such as Facebook. Through this brand recognition will also be enhanced.

**What problem happened to them?**

Businesses struggle in prediction of future sales from advertisements depending on the number of clicks by the user along with the optimization of the advertisement campaign and making them effective to attract the customers.

**When did the problem take place?**

It has been a continuous challenge to the businesses despite the constant efforts to enhance their advertising approaches and strategies.

**Where did it take place?**

This problem is addressed in the businesses who use social media platforms for the advertisements to improve their sales.

**Why did it happen?**

Nowadays, as the advertisements on the social media platforms are having the high potential to reach out the largest proportion of customers, businesses are investing and tending towards the social media ad campaigns for brand recognition, brand reachability and sales improvement. On the other side, optimization of the advertisements and prediction of future sales and profit is still a challenge to the businesses.

**How did it happen?**

The aim of this project is to provide solutions to counter this challenge by performing exploratory analysis of data. A regression model is built for predicting the future sales depending on the number of clicks on the advertisement by the user.

**Chapter 2: Data**

**Who is the dataset about?**

The dataset used in this project consists of the information related to the social media advertisement campaigns of the anonymous businesses. The dataset sample contains the targeted customers through these advertisements.

**What events, activities, behaviors, and observations etc. are recorded by the dataset?**

The dataset consists of the data about the number of occurrences of the advertisement, investment made for advertisement, the sales made after viewing the advertisement, the clicks on the advertisement by the user, user gender, ID of the campaign, and the user’s age.

**When did the event, activity, behavior, and observation, etc. take place?**

The information in the dataset is collected at various times amidst the campaign and it is cross-sectional as well.

**Where did the event, activity, behavior, and observation, etc. take place?**

The event, activity and behavior took place online at the social media platforms and the data is taken from different places of the world.

**Why did the event, activity, behavior, or observation etc. take place?**

The event took place to understand the effectiveness and impact created by a social media platform advertisement for businesses.

**How did it happen?**

The collection of the data is done by constant tracking of the user interactions made on the advertisements on the social media platforms.

**Chapter 3: Users**

**Who is the targeted user or audience?**

The targeted user or the audience are the businesses planning to improve the sales and make their brand popular by using social media platforms via advertising.

**What can the application do? What does the visualization show?**

The application will be able to help the businesses in showing the trends of their sales and predict future sales depending on the user clicks on the advertisement in the social media platforms. It helps in optimizing the advertisements to reach the users in an effective way.

**When can the user use the application/visualization?**

The application can be used by the user at any point of time to improve their social media advertisement campaigns.

**Where will the visualization and applications be deployed?**

The visualizations and the applications will be deployed on different platforms such as mobile device and the web where it can be easily accessible.

**Why is the visualization or application useful to the user?**

The visualization and the application can help the users in predicting the future sales and optimize their advertisement campaigns, which can improve their sales, reachability, and the recognition of their band. It is also helpful in providing insights on how to optimize their social media ad campaigns effectively.

**How will businesses use this application or visualization to make changes?**

Businesses will use this application to change the strategies of their ad campaigns on the social media platforms from the insights provided resulting in the improvement of their sales, recognition and reachability.