

1. Introduction:

a. Overview - A brief description about your project:

ABOUT APSCHE:

The state government has accordingly decided to fill gap by creating constituting a state council at higher education as recommended in the NEP of the government of India as recommended by the committee constituted by the UGC.

Thus AP State Council of higher education (APSCHE) came into existence to advise the government in matters relating to higher education in the state and to oversee its development with perspective planning.

DATA ANALYTICS:

Data Analysts converts raw data into actionable insights. It includes a range of tools, techniques and processes used to find trends and solve problems by using data. That can shape business processes improves decision making and foster business growth.

TYPES OF DATA ANALYTICS:

There are several types in data analytics some of them are given below:

- * Business Intelligence

- * Data visualization

- * Statistics

- * Predictive Analytics
- * Data Mining
- * Medical Diagnosis
- * Descriptive Statistics
- * Prescriptive Analytics
- * Exploratory Data Analysis
- * Regression Analysis
- * Forecasting.

Importance of Data Analytics:

It helps in business to optimize its performance, perform more effectively and maximize profit using strategy. and it relies on a variety of software tools including spreadsheets, data programs, data mining and data visualization, reporting tools, and open-source languages for the greatest data manipulation.

b. Purpose - The use of this project. What can be achieved using this:

PROJECT TITLE:

"Dissecting the Digital Landscape: A Comprehensive Analysis of Social Media."

Purpose of the Project:

The Analysis of Social Media

project under Data Analytics helps us to query, interpret and visualize datasets. Data Analysts projects enables to make data-driven decisions, enhance collaboration, and predict project outcomes. Here, the project is all about, studying our project data also known as data analytics which is crucial for improving project process.

What can be achieved using this project:

Social media analytics is the ability to gather and find meaning in data gathered from social channels to support business decisions. It can help us understand how our audience engage with our content that works and doesn't work and how to optimize our strategy for better results.

These analysis can help us to improve decision making in budget by providing insights into our audience; content and performance. It's an analytics that combines predictive analysis, reporting data analytic and data integration capabilities in person.

LITERATURE SURVEY:

a. Existing Problem - existing approaches or method to solve this problem:

Social Media:

Social Media refers to the means of interactions among people in which they create, share or exchange information and ideas in virtual communities and networks. The office of communities and marketing manages the main Facebook, Twitter, Instagram and YouTube account. It offers an array of tools including one-on-one consults with schools and offices looking to form or maintain an existing social media presence to discuss social media goals and strategy as well as offer insights and ideas.

Social Media Tools and Platforms:

- Blogs
- Facebook
- Twitter
- YouTube/Vimeo
- Flickr
- Instagram
- Snapchat
- LinkedIn
- Google

Existing Problem:

The more time spent on social media can lead to cyberbullying, social anxiety, depression and exposure to content that is not age appropriate. Social media is an addiction factor to the youth in particular. Social media can take a toll on young minds and suicide remains among the leading causes of death of social media.

Approaches or methods to solve the social media problem:

- Guidance and Counselling on how to use social media
- Creation of jobs and other Social Infrastructure
- Adequate punishments for misuses etc...

b) Proposed Solution - What is the method or solution suggested:

Being mindful and taking care about our social media habits can be the main solution for this problem. We have to set limits on the duration we spent on social media and know when to stop scrolling. We have to use social platforms only as a part of communication or to get inspired by relevant things on it but must not get addicted to it. I personally suggest to set a time limit and later on move to 'do not disturb' mode to avoid distraction.

3. THEORETICAL ANALYSIS:

Q. Block Diagram - Diagrammatic overview of the project.

A Comprehensive Analysis of Social Media

PROJECT FLOW:

- Define Problem / Problem Understanding
 - * Specify the Business Problem
 - * Business Requirements
 - * Literature Survey
 - * Social or Business Impact
- Data Collection & Extraction from Database
 - * Collect the Dataset
- Data Preparation
 - * Prepare the data for visualization
- Data Visualizations
 - * No. of unique visualizations
- Dashboard
 - * Responsive and Design of dashboard
- Story
 - * No. of scenes of Story
- Report
 - * Creating a Report
- Performance Testing
- Web Integration
 - * Dashboard and story embed with UI Flask
- Project Demonstration & Documentation
 - * Record explanation video for project.
 - * Project documentation step by step development

both Hardware / Software Designing

1. Hardware and software requirements of the project:

Hardware Requirements:

- * Architecture
- * Processing Power
- * Memory
- * Secondary Storage
- * Peripherals.

Software Requirements:

- * Platform
- * API's & Drivers
- * Web Browser etc ..

Business Requirements:

The business requirements for this project would likely include

- Data Collection
- Data Cleaning and Preparation
- Data Analysis
- Report Creation.

DATA COLLECTION:

The first requirement is to collect data from the Twitter that is relevant to the number of tweets, likes and shares as a combination of dataset.

DATA CLEANING AND PREPARATION:

The collected data must be cleaned and processed to ensure it is suitable for analysis. This may involve removing irrelevant information, correcting inconveniences, removing values and transforming the data into a format that is compatible with analysis tools.

DATA ANALYSIS:

The data must be analyzed to uncover meaningful insights. This could involve using techniques such as descriptive statistics, regression analysis and data visualization to gain a deeper understanding of the data.

REPORT CREATION:

The insights and findings from the data analysis must be presented in a report that includes visualization and analysis.

Literature Survey:

A literature Survey for a project titled "Tweet, retweet, & Conversational aspects of retweeting on Twitter". Social media has enabled conversations to occur asynchronously and beyond geographic constraints, but they are still

Typically bounded by a reasonably well defined group of participants in some sort of shared social context. Network - driven genes (e.g. social network sites, microblogging) complicate this because people follow the conversation in the context of individuals, not topical threads.

Overall, the literature Survey would provide a comprehensive of the current state of knowledge in the field of social media and helps to create a report by the analysis of the Project

Impact of Social Media:

Social Impact :-

The findings from the project could help people have a better understanding of social media and avoid unnecessary problems.

Business Impact:

Social media provides business with a platform to reach a wider audience and increase brand awareness through targeted advertising and content marketing.

Data Collection & Extraction From Database:

Data collection is the process of gathering and measuring information on variables of interest in a established systematic fashion that enables one to answer stated research question and test hypothesis and generate insights for the data

* Data Preparation:

Preparing the data for visualization involves cleaning the data to remove irrelevant & missing data . Transforming the data into a format that can be easily visualized , exploring the data to identify patterns and trends , filtering the data to focus on specific subsets of data , preparing the data for visualization Software and ensuring the data is accurate and complete . This process helps to make the data easily understandable and ready for creating visualisations to gain insights into the performance & efficiency .

Data Visualization:

Data visualization is the process of creating graphical representations of data in order to help people understand and explore the information. The goal of data visualization is to make complex data sets more accessible, intuitive, and easier to interpret.

By using visual elements such as charts, graphs, and maps, data visualization can help people quickly identify patterns, trends, and outliers in the data.

No of Unique Visualisations:

The number of unique visualizations that can be created with a given dataset. Some common types of visualizations that can be used to analyze the Twitter data include Summary chart, date chart, heat map, column chart, table, bar chart, pie chart.

Visualization

Visualization 1:

- 1) Engagement, Summary value
- 2) Date chart
- 3) Date and line heat map
- 4) Engagement, Impressions and Tweet column chart

- 5) Retweets, likes and replies table
 - 6) Retweets by month bar chart
 - 7) engagement by likes
 - 8) Likes by month pie chart.
 - 9) Engagements, Retweets, Replies waterfall chart
- Dashboard:

A dashboard is a geographical user interface (GUI) that displays information and data in an organized, easy-to-read format. Dashboards are often used to provide real-time monitoring and analysis of data, and are typically designed for a specific purpose or use case. Dashboards can be used in a variety of settings, such as business, finance, manufacturing, healthcare and many other industries. They can be used to track Key Performance Indicators (KPIs), monitor performance metrics, and display data in the form of charts, graphs and tables.

Responsive and Design of Dashboard

The responsiveness and design of a dashboard for analyzing the factors important for defining the digital landscape. A comprehensive analysis of social media analyzes various engagement metrics such as likes, comments, shares, and retweets.

to understand the level of engagement on different social media platforms. It analyses social media trends and patterns to understand the changing preferences and interests of users.

Story:

A data story is a way of presenting data and analysis in a narrative format with the goal of making the information more engaging and easier to understand. A data story typically includes a clear information introduction that sets the stage and explains the context for the data, a body that presents the data and analysis in a logical and systematical way, and a conclusion that summarizes the key findings and highlights their implications.

Data stories can be told using a variety of media, such as reports, presentations, interactive visualizations and videos. A story generally represents the data in a clear format to be easily understandable. Story is the set of scenes which include the data in an order and explain the insights of the visualization in belief.

Report :

A report is a document that presents information in a specific format and layout, usually based on data from a database or other data source. A report in IBM Cognos can contain various elements, such as tables, charts, graphs and images, as well as text and data elements, and it is designed to be used by business users to help them better understand their data and make informed decisions. There are several different types of reports available in IBM Cognos, including list reports, Crosstab reports, chart reports, and report studio reports, among others. The type of report that you choose will depend on the specific needs and requirements of your organization, as well as the data that you need to present.

Performance Testing:

Amount of Data Rendered To DB2

The amount of data that is rendered to a database depends on the size of the dataset and the capacity of the database to store and retrieve data.

Web Integration

Web data integration (WDI) is the process of aggregating and managing data from different websites into a single, homogeneous workflow.

This process includes data access, transformation, mapping, quality assurance and fusion of data.

Publishing helps us to track and monitor key performance metrics, to communicate results and progress, help a publisher stay informed, make better decisions, and communicate their performance to others.

Integrating dashboard / reports / stories to web.

Project Demonstration and Documentation

In the step we have to record an explanation video for project with to end to end solution. The whole process of the project must be explained in the Systematic Order and it should be recorded as a video, this video must be submitted to the portal mentioned.

In the next step the project documentation as to be done, as per the template provided the procedure of the project must be created as a document

RESULT:

DASHBOARD:

STORY:

REPORT:

Report of the Results:

- * The dashboard helps us to understand the different visualization created using the data.
- * The story makes a clear note of all the visualizations in a scene presentation.
- * The report is the visualizations created in a single tab directly from the sources available.

5. ADVANTAGES & DISADVANTAGES:

Although the social media can be a powerful tool for communication, information dissemination and business, it can also effect on mental health privacy and well being.

* Connectivity is the most significant benefits of social media.

- * It increases communication
- * It gives access for information
- * It can include an addiction for children.
- * Cyberbullying is the main effect of social media now-a-days
- * It can change lifestyle habits, and causes sleep disruption.
- * Disturbs mentally and increases stress etc..

6. APPLICATION:

Social media can help us engage with our customers and find out what they are actually feeling or saying about our business. One can also use social media for advertising, promotional giveaways and mobile applications.

- * It supports information publishing
- * It allows sharing
- * It builds personal and professional profiles
- * Connects to a community
- * Helps to get connected and share a secure environment.

7. CONCLUSION:

The report about my internship programme with Smart Bridge, IBM Cognos is as follows. In this project, firstly I learnt about data analytics. Data Analytics helps us to understand the data and present it in different ways according to our ideas. In this report, I have mentioned or described about each and every major aspect that I learned and observed during my internship programme. The main objective of this internship programme is to engage students with new concepts and make them creative in their own personal view and understanding.

8. FUTURE SCOPE:

Data Analysis is the future of most of the present generation because everything is related with data. Predictive Analysis and Machine learning revolutionizing social media analytics to spot trends related to offerings and brands and in future it is expected that the data analytics may rule the major part of the marketing business.

Can data analyst be a good career:

Jobs in the data analytics sector are plentiful, salaries are high and career paths one can choose are abundant. Along with this social media analyst can allow us to gain more knowledge of social media platforms, including how they work and what strategies one can use to function successfully in their designed and opted roles. Having an expanded skill set for the role may increase the number of job opportunities we receive in the future as well.