**GLOBAL SALES DATA ANALYSIS**

**INDRODUCTION:**

Nowadays, many companies have started to exist and a few of them have grown to top positions. Some companies have very large amounts of data while some small companies have fewer amounts of data. This paper aims to research the company's growth in terms of the sales of the company’s products. The first aim of the paper is to make a web application that analyses a company’s sales data of varied products. This analysis is going to be effective if we use graphs and charts. This process is named Visualization. Manual Visualization of knowledge may be a time taking process. There is already some software that performs this task, but there are many disadvantages. Software like Jupyter Notebook can't be used on mobile phones whereas websites are often accessed using mobiles. Our paper takes company data of sales of products and data of a salesperson working in a particular company and depicts graphs between fields required. Our paper is based on the project developed by using the Django framework.

**LITERATURE REVIEW:**

[1] Analysis of sales data of a company or retailer has been becoming a widely discussed topic. The sales data can consist of many records, and filtering of sales data to find meaningful intuitions are common techniques in sales analysis. Tools like dashboards help managers and owners in visualizing aggregated data. Some tools usually show the items that are sold by different sales’ points. To understand data by visualization was used as early as 1137. In all fields, there has been vast Development in visualization techniques. Examining information and data visualization help to visualize and express ideas in architecture. With the coming of computer simulation visualization pertinence has been faster. Visualization of data is used to present design data with the aid of drawings and diagrams and data is usually conceptual or special, we require scientific visualization techniques like charts and graphs, etc. Visualization should have the power to present multidimensional data and it must be synergistic and permit efficacious communication. Some researchers focus on the tools used for data analysis. They highly focus on how easy it is to use the dashboard, create connections and store data in databases and ease of sharing information .

**ADVANDAGES:**

* The main aim of our research paper is to design and develop a web application which can help companies and retailers to analyse and visualize enterprise sales data in the form of graphs.
* Since we are developing a web application for this purpose, we do not need any storage space as once deployed the application can be used by any device with an internet connection. Using websites, we can see our output quickly

**DISADVANDAGES:**

* There is a need to install software’s to analyse and visualize the sales data, users need to shift between different applications and it takes more time to visualize the data. Since, these software’s cannot be used from a mobile phone, there is a need for a computer desktop and installing these software which in turn requires space.

[2] we analysed the data sets of world’s largest retailers, Walmart Store to determine the business drivers and predict which departments are affected by the different scenarios (such as temperature, fuel price and holidays) and their impact on sales at stores’ of different locations. We have made use of Scala and Python API of the Spark framework to gain new insights into the consumer behaviours and comprehend Walmart’s marketing efforts and their data-driven strategies through visual representation of the analysed data

**ADVANDAGES:**

* After getting the analysed data in key and value it is easier to graph and see relationships between values of the date and store location using GraphX library provided by Apache Spark using its python API.

**DISADVANDAGES:**

* Retailer’s ﬁrst priority is usually to understand their customers to be able to satisfy their needs so that these customers will return to the store for future needs, thus increasing the product demands and adding to the business value. These businesses want this information to plan where and when to invest proﬁtably.

[3] A large body of traditional time-series models of predicting future sales of a product or service have relied on the past historical and seasonal sales and often provided unreliable prediction outcomes. Importantly, since these predictive models rely on only the past data of sales, they tend to ignore the dynamic impact of recent events that may have a critical influence on sales. Furthermore, although customers’ current opinion and sentiment about companies and products. The combination of social media prediction with existing analytical forcasting models is likely to be better than either of the two in isolation due to the fact that each model focuses on just one aspect of the environment which is critical to determining future outcomes.

**ADVANDAGES:**

* While previous research has employed simple predictive models such as a linear regression model or an autoregressive model, we combine social media-based topic analysis and sentiment analysis with a more sophisticated time-series analysis for both feature extractions and predictions.

**DISADVANDAGES:**

* The same framework can be used for other car manufacturers and brands. Furthermore, we think that the proposed method will be also applicable to products in other industries if those are actively discussed in discussion boards and communities on web social media

[4] This system is useful for discovering customer purchasing patterns by extracting associations or co occurrences from transactional databases. It also tracks the sales using the employee because in this system we also track the location of the employee, i.e. company employee send a report to company administrator for the sales of product. The main idea with this system is to examine the purchasing habit in different areas. So we can place another product in particular area where the supply of this product is increase which is very helpful to process of business.

**ADVANDAGES:**

* Thus we are developing a system which will help a company to get daily report of a product and also it is calculating the daily basis turnover from different areas. Company administrator does not need to collect the data from different areas this system automatically generate the report of daily basis turnover of a particular product.

**DISADVANDAGES:**

* In Daily status report System we are using the data mining techniques to enhance the sales of retail business. In data mining we use the market basket analysis techniques to enhance the growth of business

[5] Mining company networks can be a very effective method to gain deeper insights into a company's current and expected future performance. For example, a target company may appear financially stable on its own, but if its customers are suffering financially, it is likely that the target company will eventually begin to suffer as well. On the other hand, a target company whose primary customers have recently begun to grow may suggest that the target will also begin to grow, as its customers are likely to need more services or supplies from the target. While there are important caveats to these examples, mining company network information can prove to be a valuable source of both marketing insights and sales leads.

**ADVANDAGES:**

* We have designed and developed a novel application that allows GE Capital sales reps to mine company network information to identify new sales leads and develop new market insights. At the core of this system is a diverse set of visualizations embedded with a variety of filters and overlays to give users the ability to search and analyze company networks on demand.

**DISADVANDAGES:**

* The relationship data is obtained from a third party using FTP, and loaded into the Oracle database using Bash scripts and SQLLDR. The types of relationships defined in the data include business relationships such as supplier/customer and franchisor/franchisee, company relationships such as current lender, and competitors. Network Insight combines these relationship types into three categories: customer, supplier and competitor