IBM NALAIYA THIRAN PROJECT

Global Sales Data Analytics

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ABSTRACT

Data is being generated very rapidly due to increase in information in everyday life. Huge amount of data gets accumulated from various organizations that is difficult to analyze and exploit. Processing, analyzing and communicating this data are a challenge. Online shopping websites get flooded with voluminous amount of sales data every day. Analyzing and visualizing this data for information retrieval is a difficult task. Therefore, a system is required which will effectively analyze and visualize data. This paper focuses on a system which will visualize sales data which will help users in applying intelligence in business, revenue generation, and decision making, managing business operation and tracking progress of tasks. By using IBM Cognos Analytics and the global sales data we are going to identify patterns, relationships, connections using dataset, exploring relationship in the data, and visualizing the data and it will provide a conjecture and guesswork of events and will help to find answers that can be sufficiently disguised for a particular problem to come up with an optimal conclusion and a convincing solution.

<center>**Literature Survey**</center>

1. Data mining with its role in marketing, sales support and customer identification data analysis

In today's technologically advanced age, every company wants to equip its sales force with a sustainable sales force automation system to improve sales performance and customer relationship capabilities. This study examines the impact of big data analytics on the sales performance of the organizations. Current advances in information technology and the development trend of social networks have had changed the way salespeople perform their daily activities. Data related to customer buying behavior is being generated at an unprecedented rate due to the technological revolution and the advent of sources such as social networks. Sales performance helps to efficiently and effectively achieve sales process goals by looking at opportunities and improving close rates. The data analytics established in this study as a technology or system provides useful insights into customer behavior by uncovering hidden patterns in BD to aid in the development of effective strategies for sales. In the era of the big data revolution, the method of strategy formulation in sales has changed, and organizations need to use data analytics systems to meet their needs. Individual characteristics is said to be the individual perception of big data analytics. In order to improve the objectivity of the comparison results, companies can add other models to participate in the comparison, so as to obtain accurate data analysis results. Data analytics is of great significance in this era of data overflow, and can provide unforeseen insights and benefits to decision makers in various areas. If properly exploited and applied, big data analytics has the potential to provide a basis for advancement. By applying such analytics to the data, valuable information can be extracted and exploited to enhance decision making and support informed decisions.

2.Impact of big data analytics on sales performance in pharmaceutical organizations: The role of customer relationship management capabilities

The technique of studying raw data to conclude a specific piece of information is known as data analytics. It is employed to assist people and organizations in making sense of data. They are applied to the analysis of raw data to discover trends and insights. We can infer conclusions about the information they contain by looking at select datasets and identifying trends. Data analytics is carried out using specialized hardware and software. These tools and methods are frequently employed in a variety of commercial sectors to empower businesses to take wise business decisions. Additionally, the analytics give companies the ability to react quickly to changing market trends and acquire an advantage over rival companies. Various efforts can benefit from some of the components of this analytics process. A good data analytics initiative will give you a clear picture of where you are, where you have been, and where you should go by merging these elements. To improve corporate performance, however, is data analytics' ultimate objective. Depending on the specific application, the data that is evaluated may be made up of new data that has been processed for real-time analytics or historical records. For the most effective data manipulation, data analytics uses a variety of software tools, including spreadsheets, data visualization, and reporting tools, data mining software, or open-source programming languages. Inside the data analytics process, the data analytics applications involve more than just analyzing data, especially on advanced analytics projects. After the data are analyzed, it will produce charts and other infographics that can be designed to make findings easier to understand. Data visualizations often are incorporated into BI dashboard applications that display data on a single screen and can be updated in real-time as new information becomes available.

3. Data Analysis and Visualization of Sales Dataset using Power BI

Data analytics enables organizations to analyze all of their data to identify patterns and generate insights to inform and, in some cases, automate decisions by relating Smart and actionable. Today's best solutions support end-to-end analytics, from accessing, preparing and analyzing data to operating analysis and monitoring results. When analyzing data, the main task is defined objects to analyze and separate data time period analyzed, to ensure the eccentricity of data analysis results. Data is useless if it cannot be analyzed, understood and applied in context. A picture is worth a thousand words, and business analytics can help create a picture by visualizing data to provide retailers with business insights. With this information, businesses can make meaningful changes to their future plans to maximize profits and success. Most raw data, especially large-scale databases, are worthless in their unprocessed state. We can extract valuable insights from this bit store using Power BI tools. The main goal here is to read and analyze the available data sets to generate business insights and overviews. The success of any organization, company or business depends on its business division as it is. The only part of the organization that earns revenue and money and delivers profits. The importance of selling is as follows: Sales data is a broad word that includes many types of metrics, but in general if you can measure something based on sales process is the actionable sales data. Through visualization, data analysis helps students understand concepts. Much technology is available to perform business data analysis, but Power BI visualization technique is the most popular techniques to learn the basics of data analysis. With the help of visualization techniques, data interpretation and data representation can be done quickly and easily. This strategy is useful for a more solid conceptual design.

4.Survey on Growth of Business using Data Analytics for Business Intelligence in Real-Time world

Data analytics strategies can screen developments and metrics data might in any other case be misplaced withinside the mass of facts. These facts can then be used to optimize procedures to growth the overall performance of a commercial enterprise or system. Data analytics is the technology of studying uncooked records to make conclusions approximately that facts. Many of the strategies and procedures of records analytics has been automatic into mechanical procedures and algorithms that paintings over uncooked records for human consumption. Data analytics is the technology of reading uncooked statistics to make conclusions approximately data information. The strategies and approaches of statistics analytics were computerized into mechanical approaches and algorithms data paintings over uncooked statistics for human consumption. Data analytics assist a business optimize its performance. Companies everywhere in the international try and get the advantages from get entry to the statistics to improve their overall performance and boom their revenue, however processing heterogeneous varieties of information to extract the precious information is a massive hassle that many businesses try and solve. One of the most essential developments is "Big Data Analytics", a generation for Storing, Processing, and analyzing the information, groups are Managing information to apply it in new ranges and direct decision-makers. Companies can use the insights they advantage from statistics analytics to tell their decisions, main to higher outcomes. Data analytics removes lots of the guesswork from planning marketing campaigns, selecting what content material to create, growing products, and more. Data analytics additionally offers you beneficial insights into how your campaigns are appearing so that you could fine-track them for top of the line outcomes. Data analytics offer you with extra insights into your customers, permitting you to tailor customer support to their needs, offer extra personalization, and construct more potent relationships with them.

PROBLEM STATEMENT

Problem Statement (PS)	I am (Customer)	I'm trying to	But	Because	Which makes me feel
PS-1	Sales Team	Enhance sales performance	Sales Performance is not improving	Most of the charts are useless	Distress
PS-2	Company or Corporation	Make smarter business judgements	Lack of knowledge to use the data efficiently	Unstructured data is complex to understand	Troubled
PS-3	Product Lead	Improve corporate decision making	Decisions are not appropriate	Nil and Negative data values	Upset
PS-4	CEO	Finding best data analytics tool	Couldn't find one under the budget	Top rating tools are expensive	Uncertain
PS-5	Marketing Team	Develop marketing plans and strategy	No experience using dashboards	Data visualization is hard	Agony