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GLOBAL SALES DATA ANALYTICS

ABSTRACT:

Global sales data analytics refers to the technology and processes used to gather sales data and gauge sales performance. Sales leaders use these metrics to set goals, improve internal processes, and forecast future sales and revenue more accurately. In sales, many tasks are now managed through centralized cloud software, including CRMs, email marketing platforms and integration tools, making sales data readily available. Many global, industry-leading brands are now using their sales data in ingenious ways to make better business decisions, but any company can take advantage of insights and reporting tools to achieve data-driven sales success.

LITERATURE SURVEY:

[1] Kiran Singh, Rakhi Wajgi, 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. Data created by an expanding number of sensors in the environment such as traffic cameras and satellites, internet activities on social networking sites, healthcare database, government database, sales data etc., are example of huge data. 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.

[2] Aamod Khatiwada, Pradeep Kadariya, Sandip Agrahari, Rabin Dhakal, this research is the addition to the steps of making online business more user-friendly, interactive and output-oriented. The online marketing and sales of the products increase significantly if the opinion of the public for the product is analyzed intermittently. As the trend in today's date is that people update their response to the products faced by them in

day-to-day life immediately in the social media, the developed system provides the platform for the large-scale producers to inspect how the consumers are responding to their products. The concept of Big Data Analysis is used for data collection, pre-processing and data analysis. A model is obtained by training the available Data using Deep Learning, which is used for the determination of sentiment values of the collected comments. Finally, the python libraries are used for the visualization of the results of Sentiment analysis and other obtained information.

[3] **Wenhui Shan,** this article analyzes the key points of refined sales management under big data. The main points of sales management include how to establish a sales management organization, how to improve the sales management information system, how to improve the evaluation management system, and how to strengthen internal sales control. Combining the key points of data analysis under big data, the author studies the establishment of data warehouse, data cleaning and mining, the establishment of data prediction models, and the arrangement of model analysis results. The purpose of this article is to help people give full play to the advantages of big data technology applications and promote the healthy development of the enterprise economy.

[4] **Manpreet Singh, Bhawick Ghutla, Reuben Lilo Jnr, Aesaan F S Mohammed, Mahmood A Rashid,** Information technology in this 21st century is reaching the skies with large-scale of data to be processed and studied to make sense of data where the traditional approach is no more effective. Now, retailers need a 360-degree view of their consumers, without which, they can miss competitive edge of the market. Retailers have to create effective promotions and offers to meet its sales and marketing goals, otherwise they will forgo the major opportunities that the current market offers. Many times, it is hard for the retailers to comprehend the market condition since their retail stores are at various geographical locations. Big Data application enables these retail organizations to use prior year's data to better forecast and predict the coming year's sales. It also enables retailers with valuable and analytical insights, especially determining customers with desired products at desired time in a particular store at different geographical locations. In this paper, we analyzed 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 behaviors and comprehend Walmart's marketing efforts and their data-driven strategies through visual representation of the analyzed data.

[5] **Muhammad Shahbaz, Changyuan Gao, Lili Zhai, Fakhar Shahzad, Adeel Luqman, Rimsha Zahid,** every business wants to equip its salesforce with a sustainable salesforce automation system to improve sales performance and customer relationship management (CRM) capabilities. This study investigates the impact of big data analytics (BDA) on CRM capabilities and the sales performance of pharmaceutical organizations. A research model was tested based on 416 valid responses collected from pharmaceutical companies through a structured questionnaire. Structural equation modeling (SEM) was employed using Smart-PLS3 to confirm the contribution of BDA to improving CRM capabilities and sales performance. The study finds that individual characteristics such as self-efficacy, playfulness, and social norms, along with organizational characteristics such as voluntariness, user involvement, user participation, and management support, are positive predictors of salesforce perception of BDA. This positive perception of BDA increased the person-technology fit in the salesforce, which ultimately increased the CRM capabilities and sales performance.

[6] **Mateusz Baska, Helena Dudycz, Maciej Pondel,** Marketing is an important area of activity for the vast majority of enterprises. Many of them try using marketing data analysis. Both the literature and the practice of many enterprises describe the use of advanced data analysis. However, interpretations of this concept differ. The aim of this paper is to identify the interpretation of advanced data analysis in marketing, in support of decision-making processes applied in the retail trading sector. Design/methodology/approach – The study was conducted using a systematic literature review, suggested by B. Kitchenham (2004), extended by C. Wohlin & R. Prikladniki (2013). This method was modified and expanded through the division of the whole study into two phases. Each phase is intended to facilitate obtaining answers to different important research questions. The first phase constitutes an exploratory study, whose results allow the detailed analysis of the literature in the second phase of the study. Findings – The

results of this study of the relevant literature indicate that scholarly publications do not use the phrase 'Advanced data analysis', and its context is described with the term 'data analysis'. Another term used broadly within the sphere of data analysis is 'big data'. The concept of 'data analysis' in marketing is focused around the term 'big data analytics and terms linked to the word 'customer', such as 'customer-centric', 'customer engagement', 'customer experience', 'customer targeting service', and 'customers classification'. The study of the literature undertaken indicates that marketing employs data analysis in such areas as customer needs identification and market segmentation. Research implications/limitations – The study of the literature review was carried out using selected four databases containing publications, i.e., Web of Science, IEEE, Springer and ACM for the period 2008 to 2018. The research described in the article can be continued in two ways. First, by analyzing the literature presented in this paper on advanced data analysis in marketing using the method called snowball sampling. Secondly, the results obtained from the first stage of the study can be used to conduct the study with other databases. Originality/value/contribution – The main contribution of this work is the proposal of modifying the systematic literature review method, which was expanded through the introduction of two phases. This division of two stages is important for conducting studies of literature when there are no clear, established definitions for the concepts being employed. The result of the study is also a set of ordered terms and their meanings that clearly define advanced data analysis in marketing.

[7] **Imran Bashir Dar, Muhammad Bashir Khan, Abdul Zahid Khan, Bahaudin G. Mujtaba,** in response to the concerns of global data-driven disruption in marketing, this qualitative study explores the issues and challenges, which could unlock the potential of marketing analytics. This might pave the way, not only for academia–practitioner gap mitigation but also for a better human-centric understanding of utilizing the technologically disruptive marketing trends, rather making them a foe. The plethora of marketing issues and challenges were distilled into 45 segments, and a detailed tabulation of the significant ones has been depicted for analysis and discussion. Furthermore, the conceptually thick five literary containers were developed, by coupling the constructs as per similarity in their categorical nature and connections. The 'ethical issues and legality' was identified as on the top, which provided literary comprehension and managerial implication for marketing analytics conceptualization in the fourth industrial revolution era.

SUMMARY OF LITERATURE SURVEY:

S.No	Author	Year	Title	Algorithm used	Disadvantages
1	Kiran Singh, Rakhi Wajgi,	2022	Data Analysis and Visualization of Sales Data	Visualization Toolkits, Visualization Techniques, Visualization Methods, Visualization Tools	The pixel-oriented visualization techniques fail to help us in understanding the distribution of data in a multidimensional collocation.
2	Aamod Khatiwada, Pradeep Kadariya, Sandip Agrahari, Ricardo, Rabin Dhakal	2019	Big Data Analytics and Deep Learning Based Sentiment Analysis System for Sales Prediction	Data Pre-processing and Training using Deep Learning (RNN, LSTM), data scrapping, data filtration and analysis,	There were problems in the analysis of positive and negative comments of non-English language and those with special characters.
3	Wenhui Shan	2020	Research on Refined Sales Management, Data Analysis and Forecasting under Big Data	Regression equation model, E-views3.0 software	We can know that the standard error of the regression model is slightly larger than the Bootstrap model in the application process.
4	Manpreet Singh, Bhawick Ghutla, Reuben Lilo Jnr, Aesaan F S Mohammed, Mahmood A Rashid	2017	Walmart's Sales Data Analysis	MapReduce algorithm, Streaming algorithm, Data Visualization Algorithms	Retailers need to plan and evaluate according to the market driving factors which are, and not limited to unemployment rate, fuel prices
5	Muhammad Shahbaz, Changyuan Gao, Lili Zhai, Fakhar Shahzad, Adeel Luqman, Rimsha Zahid	2022	Impact of big data analytics on sales performance in pharmaceutical organizations	Data fusion and data integration, Data mining, Decision Tree algorithm Statistics.	Results of this research might change in a cross-cultural context

| 6 | Mateusz Baska, Helena Dudycz, Maciej Pondel | 2020 | Potential of Big Data for marketing | Advanced data analysis, marketing, systematic review, big data analytics. | This may breach privacy of the customers as their information such as purchases, online transactions, subscriptions are visible to their parent companies. The companies may exchange these useful customer databases for their mutual benefits. |
| 7 | Imran Bashir Dar, Muhammad Bashir Khan, Abdul Zahid Khan, Bahaudin G. Mujtaba | 2021 | A qualitative analysis of the marketing analytics literature | Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA), backward and forward search | The search metrics and selection process of the quality papers between the periods 2000 and 2020 have limitations as the canvas is not so wide to cater for the concept of marketing analytics issues and challenges from inception to conception, as in the case of meta-analysis. |

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